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JAN DELAVAL

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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Josephine Young Examiner #: 77813 Date: 12/12/02

Art Unit: 1123 Phone Number 30 605-1201 Serial Number: 09/587,662

Mail Box and Bldg/Room Location: CM1 1E07 Results Format Preferred (circle): PAPER DISK E-MAIL

CM1 8 B19

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Methods and Compositions for Modulating Drug Activity Through Telomerase

Inventors (please provide full names): All, Jessie L.S.; De Jonge WENTJES, M. Guillermo

Earliest Priority Filing Date: 06/04/1999

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Attached: 1) B6 Sheet; ~~2) Sequence~~; 3) Pending Claims (1-28; 83-55; 46-48)
+ 4) Abstract & Index

Please search: 1) ~~Sequence~~ methods AND cancer / breast AND telomerase / telomerase AND telomerase AND
a) telomerase inhibitor AND b) telomerase inhibitor AND

b) telomerase inhibitor AND

2) ~~Sequence~~ methods AND cancer / breast AND
a) protein AND b) antisense nucleic acid sequence, AZT, d4T
(or other nucleoside / nucleotide analogs) AND c) telomerase inhibitor AND
d) telomerase inhibitor AND AZT AND d4T

See claims 1, 23-27, 46-48, 46-48

Thanks!

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

03-12-02 - 42-170

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Searcher:	<u>Jan</u>	NA Sequence (#)	STN <input checked="" type="checkbox"/>
Searcher Phone #:	<u>4498</u>	AA Sequence (#)	Dialog
Searcher Location:		Structure (#)	Questel/Orbit
Date Searcher Picked Up:	<u>12/15/02</u>	Bibliographic	Dr.Link
Date Completed:	<u>12/15/02</u>	Litigation	Lexis/Nexis
Searcher Prep & Review Time:		Fulltext	Sequence Systems
Clerical Prep Time:	<u>15</u>	Patent Family	WWW/Internet
Online Time:	<u>5 20</u>	Other	Other (specify)

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 DEC 2002 HIGHEST RN 476274-11-0
DICTIONARY FILE UPDATES: 13 DEC 2002 HIGHEST RN 476274-11-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

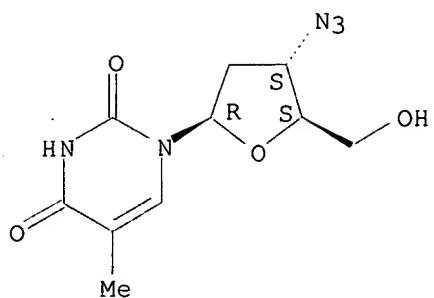
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d ide can tot 15

L5 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 30516-87-1 REGISTRY
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3'-Azido-3'-deoxythymidine
CN 3'-Azidothymidine
CN 3'-Deoxy-3'-azidothymidine
CN 874: PN: WO02055741 SEQID: 889 claimed sequence
CN Azidothymidine
CN Aztidin
CN AZT
CN AZT (pharmaceutical)
CN BW-A 509U
CN NSC 602670
CN Retrovir
CN Retrovir IV
CN Timazid
CN ZDV
CN Zidovudine
FS STEREOSEARCH
DR 399024-19-2
MF C10 H13 N5 O4
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABAB, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4190 REFERENCES IN FILE CA (1962 TO DATE)
 166 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 4208 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:370337
 REFERENCE 2: 137:369566
 REFERENCE 3: 137:365526
 REFERENCE 4: 137:364613
 REFERENCE 5: 137:363028
 REFERENCE 6: 137:358121
 REFERENCE 7: 137:346131
 REFERENCE 8: 137:345638
 REFERENCE 9: 137:345635
 REFERENCE 10: 137:345623

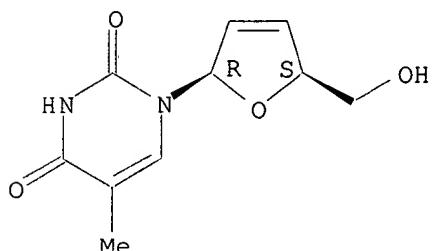
L5 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS
 RN 3056-17-5 REGISTRY
 CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 2'-Thymidinene, 3'-deoxy- (8CI)
 CN Thymine, 1-(2,3-dideoxy-.beta.-D-glycero-pent-2-enofuranosyl)- (7CI, 8CI)
 OTHER NAMES:
 CN 2',3'-Didehydro-3'-deoxythymidine
 CN 3'-Deoxy-2',3'-didehydrothymidine
 CN 879: PN: WO02055741 SEQID: 894 claimed sequence
 CN BMY 27857
 CN D 4T
 CN D 4T (nucleoside)
 CN Sanilvudine
 CN Stavudine
 CN Zerit
 FS STEREOSEARCH
 DR 132425-31-1
 MF C10 H12 N2 O4
 CI COM
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,

BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1177 REFERENCES IN FILE CA (1962 TO DATE)
 30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1186 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:363028

REFERENCE 2: 137:346131

REFERENCE 3: 137:345638

REFERENCE 4: 137:345635

REFERENCE 5: 137:342084

REFERENCE 6: 137:333119

REFERENCE 7: 137:332775

REFERENCE 8: 137:320060

REFERENCE 9: 137:319998

REFERENCE 10: 137:310928

=> d ide can 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 33069-62-4 REGISTRY

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
 (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetoxy)-12-(benzoyloxy)-
 2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-
 tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl
 ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 7,11-Methano-1H-cyclodeca[3,4]benz[1,2-b]oxete, benzenepropanoic acid
 deriv.

CN Benzenepropanoic acid, .beta.-{(benzoylamino)-.alpha.-hydroxy-, 6,12b-bis(acetoxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, [2aR-[2a.alpha.,4.beta.,4a.beta.,6.beta.,9.alpha.(.alpha.R*,.beta.S*),11.alpha.,12.alpha.,12a.alpha.,12b.alpha.]]-

CN Tax-11-en-9-one, 5.beta.,20-epoxy-1,2.alpha.,4,7.beta.,10.beta.,13.alpha.-hexahydroxy-, 4,10-diacetate 2-benzoate 13-ester with (2R,3S)-N-benzoyl-3-phenylisoserine (8CI)

OTHER NAMES:

CN ABI 007
CN BMS 181339-01
CN NSC 125973

CN Paclitaxel

CN Plaxicel

CN Taxol

CN Taxol A

CN Yewtaxan

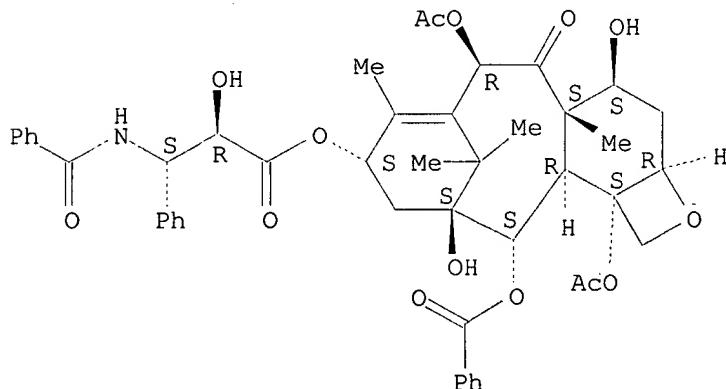
FS STEREOSEARCH

MF C47 H51 N O14

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).



6638 REFERENCES IN FILE CA (1962 TO DATE)

360 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

6666 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:375308

REFERENCE 2: 137:375278

REFERENCE 3: 137:375259

REFERENCE 4: 137:375077

REFERENCE 5: 137:371619

REFERENCE 6: 137:370237

REFERENCE 7: 137:369971

REFERENCE 8: 137:369559

REFERENCE 9: 137:368586

REFERENCE 10: 137:365210

=> d ide can 14

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 120178-12-3 REGISTRY

CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN DNA telomerase

CN Subunit (Mesocricetus auratus)

CN Telomerase

CN Telomerase reverse transcriptase

MF Unspecified

CI MAN

SR CA

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS, CBNB, CEN, CIN, IPA, PROMT, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

2901 REFERENCES IN FILE CA (1962 TO DATE)

6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2911 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:375238

REFERENCE 2: 137:367532

REFERENCE 3: 137:367487

REFERENCE 4: 137:367406

REFERENCE 5: 137:367380

REFERENCE 6: 137:365746

REFERENCE 7: 137:364456

REFERENCE 8: 137:364455

REFERENCE 9: 137:364356

REFERENCE 10: 137:364304

=> d his

(FILE 'HOME' ENTERED AT 11:30:34 ON 15 DEC 2002)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 11:30:44 ON 15 DEC 2002

E AZT/CN

L1 1 S E4

E D4T/CN

E D 4T/CN

L2 1 S E4

E PACLITAXEL/CN
 L3 1 S E3
 E TELOMERASE/CN
 L4 1 S E3
 L5 2 S L1,L2
 SEL RN
 L6 57 S E1-E2/CRN
 SEL RN L3
 L7 44 S E3/CRN
 L8 0 S L6 AND L7
 L9 11 S L6 NOT MXS/CI
 L10 7 S L9 NOT COMPD
 L11 22 S L7 NOT CYCLODEXTRIN
 L12 16 S L11 NOT COMPD
 L13 5 S L12 AND (CLH OR H2O OR C2H4O)
 L14 4 S L13 NOT IDS/CI
 L15 22 S L7 NOT L11
 L16 27 S L3,L14,L15
 L17 9 S L5,L10

FILE 'HCAPLUS' ENTERED AT 11:37:30 ON 15 DEC 2002

L18 4612 S L17
 L19 5162 S AZT OR ZIDOVUDIN# OR AZITIDIN# OR AZIDOTHYMIDIN# OR RETROVIR#
 L20 1316 S D4T OR D 4T OR STAVUDIN# OR SANILVUDIN# OR ZERIT OR BMY27857
 L21 6072 S L18-L20
 L22 6664 S L16
 L23 9158 S PACLITAXEL OR TAXOL
 L24 9195 S L22,L23
 L25 58 S L21 AND L24
 L26 2912 S L4
 L27 3658 S TELOMERASE
 L28 3661 S L26,L27
 L29 2 S L25 AND L28
 E AU J/AU
 L30 104 S E3,E6-E9,E15-E18
 E WIENTJES G/AU
 L31 8 S E4-E7
 L32 3 S L30,L31 AND L28
 L33 1 S L30,L31 AND L25
 L34 4 S L29,L32,L33
 E WIENTJES M/AU
 L35 69 S E3-E7
 L36 2 S L35 AND L28
 L37 0 S L35 AND L25
 L38 4 S L34,L36
 L39 2 S L25 AND ?TELOMER?
 L40 4 S L38,L39
 E ANTISENSE/CT
 E E4+ALL
 L41 3417 S E6,E5
 E E7+ALL
 L42 6709 S E9
 E E14+ALL
 L43 3303 S E6,E7,E5
 E NUCLEOTIDES/CT
 E E3+ALL
 L44 253674 S E7+NT
 L45 367 S L24 AND L41-L44
 L46 4 S L45 AND L28
 L47 22 S L24 AND ?TELOMER?
 L48 24 S L40,L46,L47

FILE 'REGISTRY' ENTERED AT 11:53:10 ON 15 DEC 2002

L49 1 S 120178-12-3
 L50 1 S L49, L4

FILE 'HCAPLUS' ENTERED AT 11:53:23 ON 15 DEC 2002
 L51 17 S L50 AND L48
 L52 20 S L48, L51 AND (1 OR 63)/SC, SX
 L53 4 S L48 NOT L52
 L54 22 S L40, L52
 L55 8 S L54 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
 L56 11 S L40, L55
 L57 56 S L25 NOT L48, L56
 L58 41 S L57 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
 L59 41 S L58 AND L18
 L60 41 S L59 AND L22
 L61 32 S L60 AND (?NEOPLAS? OR ?TUMOR? OR ?MALIGNAN? OR ?CANCER? OR ?C
 L62 27 S L60 AND (MIX? OR SYNERG? OR COMPOSITION OR COTHERAP? OR COMED
 L63 23 S L61 AND L62
 SEL DN AN 8 9 10 13 14 15 19
 L64 7 S E1-E21
 L65 18 S L56, L64 AND L18-L48, L51-L64

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 FILE LAST UPDATED: 13 Dec 2002 (20021213/ED)

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L65 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2002 ACS
 AN 2002:684654 HCAPLUS
 TI Telomere maintenance in telomerase-positive human ovarian SKOV-3
 cells cannot be retarded by complete inhibition of telomerase
 AU Gan, Yuebo; Mo, Yiqun; Johnston, Jeffrey; Lu, Jie; Wientjes, M.
 Guillaume; Au, Jessie L.-S.
 CS College of Pharmacy, The Ohio State University, Columbus, OH, 43210, USA
 SO FEBS Letters (2002), 527(1-3), 10-14
 CODEN: FEBLAL; ISSN: 0014-5793

PB Elsevier Science B.V.

DT Journal

LA English

CC 13 (Mammalian Biochemistry)

AB The two known mechanisms for telomere maintenance in eukaryocytes are **telomerase** in **telomerase-pos.** cells and alternative lengthening of telomeres (ALT) in **telomerase-neg.** cells. We report here that telomere maintenance in the **telomerase-pos.** human ovarian SKOV-3 cells was not affected by inhibition of **telomerase**. For comparison, the effect of **telomerase** inhibitors on telomere maintenance in another **telomerase-pos.** cell line (i.e. human pharynx FaDu cells) and the **telomerase-neg.** human osteosarcoma Saos-2 cells was examd. Telomerase activity was measured using a modified telomeric repeat amplification protocol and telomere length was measured using a soln. hybridization-based method and fluorescence in situ hybridization. A reverse transcriptase inhibitor (3'-azido-deoxythymidine or **AZT**) and an antisense against a component of human **telomerase** RNA (antisense hTR) were used to inhibit **telomerase**. FaDu and SKOV-3 cells showed comparable baseline **telomerase** activity. **Telomerase** activity in both cells was inhibited about equally by **AZT** (maximal inhibition of .apprx.80%) and by expression of antisense hTR (complete inhibition in SKOV-3 cells and maximal inhibition of .apprx.80% in FaDu cells). However, treatment with **telomerase** inhibitors resulted in .apprx.50% telomere shortening in FaDu cells but had no effect on SKOV-3 nor Saos-2 cells. SKOV-3 cells did not show the characteristic features of ALT (i.e. heterogeneous telomere length and promyelocytic leukemia bodies), whereas these ALT features were obsd. in Saos-2 cells. Collectively, these results suggest the existence of a **telomerase**-independent mechanism of telomere maintenance in the **telomerase-pos.** SKOV-3 cells.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Biessmann, H; Chromosoma 1997, V106, P63 HCPLUS
- (2) Bodnar, A; Science 1998, V279, P349 HCPLUS
- (3) Brayan, T; Nat Med 1997, V3, P1271
- (4) Counter, C; Proc Natl Acad Sci USA 1998, V95, P14723 HCPLUS
- (5) Danilevskaya, O; Chromosoma 1994, V103, P215 HCPLUS
- (6) Dunham, M; Nat Genet 2000, V26, P447 HCPLUS
- (7) Feng, J; Science 1995, V269, P1236 HCPLUS
- (8) Folini, M; J Invest Dermatol 2000, V114, P259 HCPLUS
- (9) Gan, Y; Pharmacol Res 2001, V18, P1655 HCPLUS
- (10) Gan, Y; Pharmacol Res 2001, V18, P488 HCPLUS
- (11) Grobelny, J; J Cell Sci 2000, V113, P4577 HCPLUS
- (12) Hahn, W; Nat Med 1999, V5, P1164 HCPLUS
- (13) Hande, M; J Cell Biol 1999, V144, P589 HCPLUS
- (14) Harley, C; Nature 1990, V345, P458 HCPLUS
- (15) Hsu, H; Proc Natl Acad Sci USA 1999, V96, P12454 HCPLUS
- (16) Kim, N; Science 1994, V266, P2011 HCPLUS
- (17) Lundblad, V; Cell 1993, V73, P347 HCPLUS
- (18) Lundblad, V; Mutat Res 2000, V451, P227 HCPLUS
- (19) Lustig, A; Proc Natl Acad Sci USA 1986, V83, P1398 HCPLUS
- (20) Reddel, R; Radiat Res 2001, V155, P194 HCPLUS
- (21) Rich, T; Nature 2000, V407, P777 HCPLUS
- (22) Ritchie, K; Mol Cell Biol 1999, V19, P6065 HCPLUS
- (23) Roth, W; Mol Cell Biol 1997, V17, P5176
- (24) Strahl, C; Mol Cell Biol 1996, V16, P53 HCPLUS
- (25) Vaziri, H; Curr Biol 1998, V8, P279 HCPLUS
- (26) Villa, R; FEBS Lett 2000, V473, P241 HCPLUS
- (27) Yeager, T; Cancer Res 1999, V59, P4175 HCPLUS
- (28) Zakian, V; Science 1995, V270, P1601 HCPLUS

AN 2002:521462 HCAPLUS
 DN 137:88442
 TI Incensole and furanogermacrens and compounds in treatment for inhibiting neoplastic lesions and microorganisms
 IN Shanahan-Pendergast, Elisabeth
 PA Ire.
 SO PCT Int. Appl., 68 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC A61K031-00
 CC 1-6 (Pharmacology)
 Section cross-reference(s): 10, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053138	A2	20020711	WO 2002-IE1	20020102
	WO 2002053138	A3	20020919		
				W: AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD, UA, UG, US, VN, YU, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG	

PRAI IE 2001-2 A 20010102

OS MARPAT 137:88442

AB The invention discloses the use of incensole and/or furanogermacrens, derivs. metabolites and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immunodysregulatory disorders. These compds. can be administered alone or in combination with conventional chemotherapeutic, antiviral, antiparasite agents, radiation and/or surgery. Incensole and furanogermacren and their mixt. showed antitumor activity against various human carcinomas and melanomas and antimicrobial activity against *Staphylococcus aureus* and *Enterococcus faecalis*.

ST neoplastic lesion treatment incensole furanogermacren compd; antitumor incensole furanogermacren; antimicrobial incensole furanogermacren

IT Proteins

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A, immunomodulator based on, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia

Lymphoma
(B-cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Intestine, disease

(Crohn's, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Canarypox virus

(IL-2 of, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT GTPase-activating protein

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Ras-GAP, inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Sdi 1, mimetics, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Skin, neoplasm

(Sezary syndrome; incensole and furanogermacrens and compds. as

antitumor and antimicrobial agents)

IT Leukemia

Lymphoma
(T-cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Transcription factors

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(WT1 (Wilms' tumor suppressor 1), therapy based on; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Keratosis
(actinic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia
(acute; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lung, neoplasm
(adenocarcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Melanoma
(amelanotic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Urokinase-type plasminogen activator receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antagonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Nutrients
(anti-, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-dorsalizing morphogenetic protein-1, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Androgens

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiandrogens, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Estrogens

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiestrogens, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Antitumor agents

(antineoplastons, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug resistance

(antitumor; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lung, disease

(aspergillosis, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Infection

(bacterial, intracellular or extracellular, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Candida

(candidiasis from, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and

antimicrobial agents)

IT Prostate gland
(carcinoma, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Ovary, neoplasm
Stomach, neoplasm
(carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Mycobacterium
(cell wall sk and monophosphoryl lipid A, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Diterpenes
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cembranoid, alcs.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Diterpenes
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cembranoid; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Nervous system
(central, disease, precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Nervous system
(central, neoplasm; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Uterus, disease
(cervix, dysplasia; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Uterus, neoplasm
(cervix; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Porphyrins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chlorins, benzo-, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Porphyrins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chlorins, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia
(chronic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-, enteric coating of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Intestine, neoplasm
(colon, carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Intestine, neoplasm
(colon, polyp; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Intestine
(colon, precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Intestine, neoplasm
(colon; incensole and furanogermacrens and compds. as antitumor and

- IT antimicrobial agents)
- IT Polyoxyalkylenes, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates with pyridoxylated Hb; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Quinones
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cyclopentanthraquinones, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Bronchi
- IT Prostate gland
(disease, dysplasia; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Mammary gland
(disease, precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Bladder
(diseases, lesions; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Immunity
(disorder, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Carbohydrates, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug delivery systems contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug targeting to HIV infected cells using; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Skin, neoplasm
(dysplastic nevus syndrome; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Dendritic cell
(enhancement of endogenous precursor; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Heat-shock proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(enhancement of endogenous; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric coating of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Drug delivery systems
(enteric-coated; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Drug delivery systems
(enteric; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Escherichia coli
(enterohemorrhagic, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Escherichia coli
(enteroinvasive, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Escherichia coli
(enteropathogenic, treatment of immunodysregulation condition caused by

- infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Escherichia coli
(enterotoxigenic, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Lung, neoplasm
(epidermoid; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Gene therapy
(erythrocyte, vector system, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(for apoptosis, modulators of, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Fusion proteins (chimeric proteins)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene BCR-ABL, antagonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene c-raf, antagonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Multidrug resistance
(gene inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Apoptosis
(gene modulators or regulators, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Erythrocyte
(gene therapy vector system, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Envelope proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gp120env, drug targeting to HIV infected cells using antibodies to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Envelope proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gp160env, drug targeting to HIV infected cells using antibodies to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Leukemia
(hairy-cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Peptides, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulant, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Chemotherapy
- Parasiticides
- Radiotherapy
- Surgery

- (in combination with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Adrenal gland, neoplasm
Anti-AIDS agents
Anti-infective agents
Antiarthritics
Antiasthmatics
Antidiabetic agents
Antidiarrheals
Antitumor agents
Brain, neoplasm
Burn
Drug delivery systems
Drug targeting
Enterococcus faecalis
Hodgkin's disease
Human
Lymphoma
Mammalia
Melanoma
Multiple myeloma
Neoplasm
Newborn
Ovary, neoplasm
Pancreas, neoplasm
Sarcoma
Staphylococcus aureus
Stomach, neoplasm
Testis, neoplasm
(incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Yeast
(infection with, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Intestine, disease
(inflammatory, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Cartilage
(inhibitor derived from, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Insulin-like growth factor I receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Translation, genetic
(inhibitors of, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Signal transduction, biological
(inhibitors or modulators, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Macrophage migration inhibitory factor
Ras proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Insulin-like growth factor-binding proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(insulin-like growth factor I-binding, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as

- antitumor and antimicrobial agents)
- IT Parasite
 - (intracellular or extracellular infection with, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Gamma ray
 - (irradn., treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Intestine, disease
 - (irritable bowel syndrome, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Digestive tract
 - (irritation, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Paracoccidioides
 - (juvenile paracoccidiomycosis, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Lung, neoplasm
 - (large-cell carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Skin, disease
 - (lesions; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Virus
 - (lipid envelope, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Peptides, biological studies
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (lipophilic disaccharide, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Drug delivery systems
 - (liposomes; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Peptides, biological studies
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (lytic, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT . Pulverization
 - (micronization; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Double stranded RNA
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (mismatched, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Antibodies
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (monoclonal, conjugates, with liposome or carbohydrate vehicles, to tumor-assocd. antigen; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Antibodies
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (monoclonal, to human chorionic gonadotropin, pharmaceutical formulation further including; incensole and furanogermacrens and

compds. as antitumor and antimicrobial agents)

IT Leukemia
(monocytic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lipid A
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monophosphates, and mycobacterium cell wall sk, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Nerve, disease
(motor, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Gram-positive bacteria (Firmicutes)
(multi-drug resistant; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Gene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(multidrug resistance, inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia
(myelogenous; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia
(myelomonocytic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(nasal; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Bladder
Mammary gland
Mouth
Prostate gland
(neoplasm; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Nerve, neoplasm
(neuroblastoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Antioxidants
(nitroxide, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lymphocyte
(null cell, leukemia; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interleukin 2
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(of canarypox virus, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cytokines
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(oral inducer, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(oral; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(parenterals; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Antiviral agents
(pharmaceutical formulation further contg.; incensole and

- IT furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Interferons
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Angiogenesis inhibitors
 - Antivenoms
 - Cytotoxic agents
 - Immunostimulants
 - Mycobacterium bovis
 - Venoms
 - (pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Antisense oligonucleotides
 - Estrogens
 - Heregulins
 - Hormones, animal, biological studies
 - Interleukins
 - Leukemia inhibitory factor
 - Oligonucleotides
 - Polyamines
 - Ribozymes
 - Steroids, biological studies
 - Taxanes
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Disease, animal
 - (polyposis syndrome; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Fatty acids, biological studies
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (poppy seed-oil, Et esters, labeled with iodine-131, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Kidney, disease
 - Lung, disease
 - Stomach, disease
 - (precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Drug delivery systems
 - (prodrugs; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Hemoglobins
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (reaction products, with pyridoxal phosphate, conjugates with polyoxyethylene, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Drug delivery systems
 - (rectal; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Kidney, neoplasm
 - (renal cell carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Antitumor agents
 - (resistance to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT Proteins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(saporins, fibroblast growth factor conjugates; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(senescence-derived inhibitor 1, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Oligonucleotides
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sense, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Shock (circulatory collapse)
(septic, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(single chain antigen binding protein, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cell wall
(sk of mycobacteria and monophosphoryl lipid A, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia
(small cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lung, neoplasm
(small-cell carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Neoplasm
(solid; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Carcinoma
(squamous cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cell
(stem, division inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cell
(stem, inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(sublingual; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Glycosaminoglycans, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synthetic, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lupus erythematosus
(systemic, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Human immunodeficiency virus
(targeting to cells infected with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(thymopoietin, agonists, pharmaceutical formulation further including;
incensole and furanogermacrens and compds. as antitumor and
antimicrobial agents)

IT Drug delivery systems
(topical; incensole and furanogermacrens and compds. as antitumor and
antimicrobial agents)

IT Stem cell factor
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(totipotent, pharmaceutical formulation further including; incensole
and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Adeno-associated virus
Balantidium
Balantidium coli
Borrelia
Campylobacter
Candida
Coronavirus
Cryptococcus (fungus)
Cryptosporidium
DNA viruses
Entamoeba
Entamoeba histolytica
Filovirus
Flavivirus
Haemophilus
Hantavirus
Human papillomavirus
Human parainfluenza virus
Human poliovirus
Influenza virus
Legionella
Leishmania
Leishmania braziliensis
Leishmania donovani
Leishmania mexicana
Leishmania tropica
Listeria
Measles virus
Mycoplasma
Papillomavirus
Pestivirus
Picornaviridae
Plasmodium berghei
Plasmodium falciparum
Plasmodium malariae
Plasmodium ovale
Plasmodium vivax
Pneumocystis
Pneumocystis carinii
Poxviridae
Pseudomonas
RNA viruses
Respiratory syncytial virus
Retroviridae
Rhinovirus
Rubivirus
Salmonella
Shigella
Staphylococcus
Streptococcus
Togaviridae

Toxoplasma
Toxoplasma gondii
Trichomonas
Trichomonas vaginalis
Trypanosoma
Trypanosoma brucei
Trypanosoma cruzi
Trypanosoma gambiense
Trypanosoma rhodesiense
Vibrio
Yersinia
(treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Corticosteroids, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Nucleoside analogs
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Immunosuppressants
Mycosis
Protozoa
Wound
(treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Arthritis
Asthma
Autoimmune disease
Cachexia
Cirrhosis
Diabetes mellitus
Diarrhea
Multiple sclerosis
Respiratory distress syndrome
(treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tumor-assocd., drug targeting with monoclonal antibody to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Hematopoietic precursor cell
(tumors; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cytotoxic agents
(tyrphostins, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(vaginal; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Infection
(viral, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Disease, animal
(wasting, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
 (.alpha., n1, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (.alpha., n3, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (.alpha., pharmaceutical formulation further including; incensole and
 furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (.alpha.-2a, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (.alpha.-2b, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lactams
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (.beta.-, pharmaceutical formulation further including; incensole and
 furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (.beta.1, a, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (.gamma., 1b, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 37221-79-7, Vasoactive intestinal peptide
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (antagonist, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 9002-06-6, Thymidine kinase
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (antagonists, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 505-60-2, Mustard
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (anticancer, pharmaceutical formulation further including; incensole
 and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 7585-39-9, .beta.-Cyclodextrin 7585-39-9D, .beta.-Cyclodextrin,
 hydroxypropyl derivs. 10016-20-3, .alpha.-Cyclodextrin 12619-70-4,
 Cyclodextrin 17465-86-0, .gamma.-Cyclodextrin
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (as pharmaceutical carrier; incensole and furanogermacrens and compds.
 as antitumor and antimicrobial agents)

IT 80-62-6, Methyl methacrylate 2867-47-2, (2-Dimethylaminoethyl)
 methacrylate 9004-38-0, Cellulose acetate phthalate 34346-01-5,
 Poly(lactic acid-glycolic acid) 441015-98-1
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

- (enteric coating of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 121749-39-1
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (epharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 54-47-7D, Pyridoxal phosphate, reaction products with Hb conjugates
 76-49-3, Bornyl acetate 80-57-9, Verbenone 87-44-5,
 .beta.-Caryophyllene 88-84-6, .beta.-Guaiene 99-49-0, Carvone
 99-83-2, .alpha.-Phellandrene 99-87-6, p-Cymene 112-14-1, Octyl
 acetate 123-35-3, Myrcene 473-11-0, Eudesmane 489-80-5, Guaiane
 495-61-4, .beta.-Bisabolene 502-61-4, Farnesene 507-70-0, Borneol
 511-59-1, .beta.-Santalene 512-61-8, .alpha.-Santalene 515-12-8,
 Elemane 523-47-7, .beta.-Cadinene 555-10-2, .beta.-Phellandrene
 562-74-3, Terpinen-4-ol 1335-14-4 1674-08-4, trans-Pinocarveol
 1820-09-3, trans-Ver-benol 2867-05-2, .alpha.-Thujene 3856-25-5,
 .alpha.-Copaene 4602-84-0, Farnesol 5208-59-3, .beta.-Bourbonene
 6753-98-6, Humulene 6895-56-3, .beta.-Bergamotene 7663-66-3,
 Bergamotane 8007-35-0, Terpinyl acetate 8013-00-1, Terpinene
 10178-38-8, Echinodol 14998-63-1D, Rhenium-186, etidronate complexes,
 biological studies 17627-44-0, .alpha.-Bisabolene 18794-84-8,
 .beta.-Farnesene 19912-61-9, Furanodiene 20479-06-5, .beta.-Ylangene
 21698-66-8, Incensole oxide 21698-67-9, Incensole oxide acetate
 22419-74-5, Incensole 25269-16-3, Isocembrene 25322-68-3D, conjugates
 with pyridoxylated Hb 28028-64-0, Germacrene 29063-28-3, Octanol
 29350-73-0, Cadinene 31570-39-5, Cembrene-A 34701-53-6 35731-88-5,
 Isoincensole oxide 67921-02-2, Cembreol 94325-73-2 94325-73-2D,
 compds. 122537-31-9, Oplopame 441771-56-8, Isoincensole 441771-57-9,
 Isoincensole acetate 441771-74-0, SKB 4
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 141436-78-4, Protein kinase C
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 52660-18-1, Casein kinase 1 366806-33-9, Casein kinase 2
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors (ICOS), pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 144114-21-6, HIV-1 Protease
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors, pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 70-18-8, Glutathione, biological studies 9030-21-1, Purine nucleoside phosphorylase 9040-48-6, Gelatinase 79747-53-8, Protein tyrosine phosphatase 79955-99-0, Stromelysin 80449-02-1, Tyrosine kinase 106096-93-9, Basic fibroblast growth factor 120178-12-3, Telomerase 131384-38-8, Ras farnesyltransferase 140879-24-9, Proteasome 141256-52-2, Matrilysin 141907-41-7, Matrix metalloproteinase 375798-61-1, Phosphatase, phosphoprotein
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 10102-43-9, Nitric oxide, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (modulators, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 9002-61-3, Chorionic gonadotrophin
 RL: BSU (Biological study, unclassified); BIOL (Biological study)

- (monoclonal antibody to human, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 9068-38-6, Reverse transcriptase
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (nonnucleoside inhibitors of, pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 1406-18-4, Vitamin E
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oil, as pharmaceutical carrier; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 54-05-7, Chloroquine 54-42-2, Idoxuridine 60-54-8, Tetracycline 69-74-9, Cytarabine Hydrochloride 70-00-8, Trifluridine 80-08-0, Dapsone 90-34-6, Primaquine 100-33-4, Pentamidine 130-95-0, Quinine 443-48-1, Metronidazole 494-79-1, Melarsoprol 665-66-7, Amantadine Hydrochloride 1501-84-4, Rimantadine Hydrochloride 1910-68-5, Methisazone 3056-17-5, d4T 3736-81-0, Diloxanide furoate 5536-17-4, Vidarabine 7481-89-2, DdC 8064-90-2 9004-70-0, HE-2000 10500-82-0, Famotidine Hydrochloride 10540-97-3, Memantine Hydrochloride 11006-77-2, Statolon 15176-29-1, Edoxudine 15185-43-0, DOTC 19387-91-8, Tinidazole 19885-51-9, Aranotin 22994-85-0, Benznidazole 23256-30-6, Nifurtimox 25526-93-6, Alovudine 27591-69-1, Tilorone Hydrochloride 27762-78-3, Kethoxal 29984-33-6, Vidarabine Phosphate 30516-87-1, AZT 35607-20-6, Avridine 36791-04-5, Ribavirin 36983-81-0, Fosfonet Sodium 37338-39-9 39809-25-1, Penciclovir 51867-87-9 53230-10-7, Mefloquine 56219-57-9, Arildone 59277-89-3, Acyclovir 63198-97-0, Viroxime 63585-09-1, Foscarnet Sodium 63968-64-9D, Artemisinin, derivs. 68693-30-1, Somantadine Hydrochloride 69123-90-6, Fiacitabine 69123-98-4, Fialuridine 69655-05-6, DdI 69657-51-8, Acyclovir Sodium 69756-53-2, Halofantrine 72301-78-1, Zinviroxime 72301-79-2, Enviroxime 73514-87-1, Fosarilate 77181-69-2, Sorivudine 80883-55-2, Enviradene 82410-32-0, Ganciclovir 84408-37-7, Desciclovir 85087-20-3, Doxycycline 87495-31-6, Disoxaril 95233-18-4, Atovaquone 100817-46-7, Stibogluconic acid 104227-87-4, Famciclovir 106362-32-7, Peptide T 106941-25-7, PMEA 107910-75-8, Ganciclovir Sodium 110042-95-0, Acemannan 110143-10-7, Lodenosine 113852-37-2, Cidofovir 124436-59-5, Pirodavir 124832-27-5, Valacyclovir Hydrochloride 127759-89-1, Lobucavir 127779-20-8, Saquinavir 129618-40-2, Nevirapine 132210-43-6, Cipamfylline 134678-17-4, 3TC 136470-78-5, Abacavir 136817-59-9, Delavirdine 137487-62-8, Alvircept Sudotox 138540-32-6, Atevirdine Mesylate 141204-94-6, Co-artemether 142340-99-6 142632-32-4, Calanolide A 143491-57-0, Coviracil 145514-04-1, DAPD 147127-20-6, Tenofovir 147221-93-0, Delavirdine Mesylate 147318-81-8, KNI-272 147362-57-0, Loviride 149845-06-7, Saquinavir Mesylate 149950-60-7, Emivirine 150378-17-9, Indinavir 153127-49-2, ALX40-4C 154598-52-4, DMP 266 155148-31-5, AMD 3100 155213-67-5, Ritonavir 156879-70-8 159519-65-0, Pentafuside 159989-64-7, Nelfinavir 163451-80-7 170020-61-8, FP-21399 174484-41-4, Tipranavir 177932-89-7, DMP-450 178979-85-6, AG 1549 185220-03-5, PNU142721 192725-17-0, ABT-378 214287-88-4, DPC961 216863-66-0, L-756423 251562-00-2, T-1249 383198-56-9, BW 141 383198-57-0, BMS-232630 383198-58-1, PRO 542
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
- IT 50-18-0, Cyclophosphamide 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide 50-76-0, Dactinomycin 50-91-9, Floxuridine 51-21-8, Fluorouracil 51-75-2, Mechlorethamine 52-24-4, Thiotapec 53-19-0, Mitotane 53-43-0, DHEA 53-79-2, Puromycin 54-71-7, Pilocarpine hydrochloride 54-91-1, Pipobroman 55-21-0D, Benzamide,

N-substituted compds. 55-86-7, Mechlorethamine Hydrochloride 55-86-7D,
 Nitrogen mustard, derivs. 55-98-1, Busulfan 56-53-1,
 Diethylstilbestrol 57-22-7, Vincristine 57-63-6, Ethinyl oestradiol
 57-83-0, Progesterone, biological studies 58-05-9, Leucovorin 58-58-2,
 Puromycin Hydrochloride 59-05-2, Methotrexate 66-75-1, Uracil Mustard
 83-89-6, Acriquine 101-60-0, Porphyrin 106-60-5, Aminolevulinic acid
 114-70-5, Sodium phenylacetate 122-79-2, Phenylacetate 125-45-1,
 Azetepa 125-84-8, Aminoglutethimide 127-07-1, Hydroxyurea 143-67-9,
 Vinblastine Sulfate 145-63-1, Suramin 147-94-4, Cytarabine 148-82-3,
 Melphalan 154-42-7, Thioguanine 154-93-8, Carmustine 302-49-8,
 Uredopa 302-79-4, Tretinoin 305-03-3, Chlorambucil 320-67-2,
 Azacitidine 359-83-1, Pentazocine 364-62-5, Metoclopramide 366-70-1,
 Procarbazine Hydrochloride 378-44-9, Betamethasone 423-55-2,
 Perflubron 459-86-9, Mitoguazone 465-65-6, Naloxone 472-15-1,
 Betulinic acid 481-29-8, Epiandrosterone 518-28-5, Podophyllotoxin
 520-85-4, Medroxyprogesterone 521-12-0, Dromostanolone Propionate
 536-59-4, Perillyl alcohol 548-04-9, Hypericin 566-48-3, Formestane
 569-57-3, Chlorotrianisene 578-95-0D, Acridone, imidazo derivs.
 578-95-0D, Acridone, propylbis derivs. 595-33-5, Megestrol Acetate
 645-05-6, Altretamine 646-08-2, .beta.-Alethine 671-16-9, Procarbazine
 801-52-5, Porfiromycin 865-21-4, Vinblastine 911-45-5, Clomifene
 968-93-4, Testolactone 1271-19-8, Titanocene dichloride 1402-81-9,
 Ambomycin 1403-47-0, Duazomycin 1403-99-2, Mitogillin 1404-00-8,
 Mitomycin 1404-15-5, Nogalamycin 1404-20-2, Peliomycin 1404-64-4,
 Sparsomycin 1661-29-6, Meturedopa 1972-08-3, Dronabinol 1980-45-6,
 Benzodepa 2068-78-2, Vincristine Sulfate 2353-33-5, Decitabine
 2608-24-4, Piposulfan 2809-21-4D, Etidronic acid, rhenium-186 complexes
 2919-66-6, Melengestrol acetate 2998-57-4, Estramustine 2998-57-4D,
 Estramustine, analogs 3073-59-4, Hexamethylene bisacetamide 3094-09-5,
 Doxifluridine 3562-63-8, Megestrol 3778-73-2, Ifosfamide 3930-19-6,
 Streptonigrin 4105-38-8 4291-63-8, Cladribine 4342-03-4, Dacarbazine
 4342-07-8 4803-27-4, Anthramycin 5072-26-4, Buthionine sulfoximine
 5373-42-2, Thaliblastine 5508-58-7, Andrographolide 5579-27-1,
 Simtrazene 5581-52-2, Thiamiprime 5696-17-3, Epipropidine 6157-87-5,
 Trestolone Acetate 7281-31-4, Vinglycinate Sulfate 7440-06-4D,
 Platinum, lipophilic compds. or complexes 7440-06-4D, Platinum, triamine
 complexes 7644-67-9, Azotomycin 7689-03-4D, Camptothecin, derivs.
 7724-76-7, Riboprine 7761-45-7, Metoprime 8052-16-2, Cactinomycin
 9002-71-5, Thyroid-stimulating hormone 9014-02-2, Zinostatin
 9014-42-0, Thrombopoietin 9014-42-0D, Thrombopoietin, mimetics
 9015-68-3, Asparaginase 9027-98-9 9041-93-4, Bleomycin Sulfate
 9050-67-3, Sizofiran 10043-49-9, Gold-198, biological studies
 10087-89-5, Enpromate 10318-26-0, Mitolactol 10403-51-7, Mitindomide
 10540-29-1, Tamoxifen 11002-22-5, Apurinic acid 11029-06-4, Elemene
 11043-98-4, Mitocromin 11043-99-5, Mitomalcin 11056-06-7, Bleomycin
 11056-12-5, Cirolemycin 11056-14-7, Mitocarcin 11056-15-8, Mitosper
 12713-07-4D, Verdin, compds. 13010-47-4, Lomustine 13311-84-7,
 Flutamide 13494-90-1, Gallium nitrate 13665-88-8, Mopidamol
 13909-09-6, Semustine 14769-73-4, Levamisole 15475-56-6, Methotrexate
 Sodium 15639-50-6, Safingol 15663-27-1, Cisplatin 17021-26-0,
 Calusterone 17902-23-7, Tegafur 18378-89-7, Plicamycin 18416-85-8,
 Lombricine 18556-44-0, Vinrosidine Sulfate 18588-57-3, Etoprine
 18883-66-4, Streptozocin 19916-73-5, O6-Benzylguanine 20098-14-0,
 Idramantone 20537-88-6, Amifostine 20638-84-0, Retinamide
 20830-81-3, Daunorubicin 21059-48-3, Veramine 21679-14-1, Fludarabine
 22668-01-5, Etanidazole 23214-92-8, Doxorubicin 23541-50-6,
 Daunorubicin Hydrochloride 23593-75-1, Clotrimazole 24280-93-1,
 Mycophenolic Acid 24584-09-6, Dexrazoxane 25316-40-9, Adriamycin
 27302-90-5, Oxisuran 27314-97-2, Tirapazamine 27548-93-2D, Baccatin
 III, derivs. 27686-84-6, Masoprocol 29069-24-7, Prednimustine
 29767-20-2, Teniposide 30303-65-2, Docosanol 30387-51-0, Asperlin
 30868-30-5, Pyrazofurin 31430-18-9, Nocodazole 31441-78-8,
 Mercaptopurine 32954-58-8, Ipomeanol 33069-62-4,

Paclitaxel 33069-62-4D, **Paclitaxel**, analogs
 and derivs. 33419-42-0, **Etoposide** 35301-24-7, **Cedefingol** 35846-53-8,
Maytansine 35943-35-2, **Triciribine** 36508-71-1, **Zorubicin Hydrochloride**
 37717-21-8, **Flurocitabine** 38270-90-5, **Strontium Chloride Sr 89**
 38321-02-7, **Dexverapamil** 39325-01-4, **Picibanil** 40391-99-9, **Pamidronic**
 acid 41575-94-4, **Carboplatin** 41729-52-6, **Dezaguanine** 41992-22-7,
Spirogermanium Hydrochloride 42228-92-2, **Acivicin** 42616-25-1,
Methioninase 50264-69-2, **Lonidamine** 51264-14-3, **Amsacrine**
 51321-79-0, **Sparfasic acid** 52128-35-5, **Trimetrexate** 52205-73-9,
Estramustine Phosphate Sodium 52794-97-5, **Carubicin Hydrochloride**
 53643-48-4, **Vindesine** 53714-56-0, **Leuprolide** 53910-25-1, **Pentostatin**
 54081-68-4, **Vinleurosine Sulfate** 54824-17-8, **Mitonafide** 55435-65-9,
Acodazole Hydrochloride 56390-09-1, **Epirubicin Hydrochloride**
 56420-45-2, **Epirubicin** 56605-16-4, **Spiromustine** 56741-95-8,
Bropirimine 57381-26-7, **Irsogladine** 57576-44-0, **Aclarubicin**
 57773-63-4, **Triptorelin** 57773-65-6, **Deslorelin** 57852-57-0, **Idamycin**
 57998-68-2, **Diaziquone** 58066-85-6, **Miltefosine** 58525-82-9, **Azatyrosine**
 58957-92-9, **Idarubicin** 58970-76-6, **Ubenimex** 59653-73-5, **Teroxirone**
 59917-39-4, **Vindesine Sulfate** 59989-18-3, **5-Ethynyluracil** 60084-10-8,
Tiazofurin 60203-57-8, **Prostaglandin J2** 60940-34-3, **Ebselen**
 61825-94-3, **Oxaliplatin** 61966-08-3, **Triciribine Phosphate** 62304-98-7,
Thymalfasin 62435-42-1, **Perfosfamide** 62488-57-7 62816-98-2,
Ormaplatin 62928-11-4, **Iproplatin** 63590-19-2, **Balanol** 63612-50-0,
Nilutamide 63950-06-1, **Esorubicin Hydrochloride** 65057-90-1,
Talisomycin 65093-40-5, **Cytarabine ocfosfate**
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)

(pharmaceutical formulation further including; incensole and
 furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 65222-35-7, **Pazelliptine** 65271-80-9, **Mitoxantrone** 65646-68-6,
Fenretinide 65807-02-5, **Goserelin** 65886-71-7, **Fazarabine** 66569-27-5,
Sparfosate Sodium 66849-34-1, **Dexifosfamide** 67699-41-6, **Vinzolidine**
Sulfate 68278-23-9, **Eflornithine Hydrochloride** 68475-42-3, **Anagrelide**
 69839-83-4, **Didox** 70052-12-9, **Eflornithine** 70384-29-1, **Peplomycin**
Sulfate 70476-82-3, **Mitoxantrone Hydrochloride** 70641-51-9, **Edelfosine**
 70711-40-9, **Amantantrone Acetate** 71294-60-5, **Rohitukine** 71439-68-4,
Bisantrene Hydrochloride 71486-22-1, **Vinorelbine** 71522-58-2,
Forfenimex 71628-96-1, **Menogaril** 72238-02-9D, **Retelliptine**, demethyl
 derivs. 72496-41-4, **Pirarubicin** 72629-69-7, **Sarcophytol A**
 72732-56-0, **Piritrexim** 72741-87-8, **Swainsonine** 73105-03-0,
Pentamustine 74149-70-5, **Parabactin** 74349-48-7, **Mutamycin**
 74381-53-6, **Leuprolide Acetate** 74790-08-2, **Spiroplatin** 75219-46-4,
Atrimustine 75330-75-5, **Lovastatin** 75607-67-9, **Fludarabine Phosphate**
 75775-33-6D, **Purpurin**, compds. 75957-60-7, **Splenopentin** 76932-56-4,
Nafarelin 77016-85-4, **Plomestane** 77327-05-0, **Didemnin B** 77599-17-8,
Panomifene 77858-21-0, **Velaresol** 78113-36-7, **Romurtide** 78186-34-2,
Bisantrene 79778-41-9, **Neridronic acid** 79831-76-8, **Castanospermine**
 80451-05-4, **Cecropin B** 80576-83-6, **Edatrexate** 80663-95-2 80841-47-0,
Asulacrine 81424-67-1, **Caracemide** 81965-43-7, **SarCNU** 82230-03-3,
Carbetimer 82413-20-5, **Droloxifene** 82707-54-8, **Neutral endopeptidase**
 82855-09-2D, **Combretastatin**, analogs 82952-64-5, **Trimetrexate**
Glucuronate 83086-73-1, **Tubulozole Hydrochloride** 83150-76-9,
Octreotide 83200-11-7, **Vinepidine Sulfate** 83519-04-4, **Ilmofosine**
 83997-75-5, **Iododoxorubicin** 84030-84-2, **Telluropyrylium** 84088-42-6,
Roquinimex 84371-65-3, **Mifepristone** 84412-94-2, **Ruboxyd** 85465-82-3,
Thymotrinan 85622-93-1, **Temozolomide** 85754-59-2, **Ambamustine**
 85969-07-9, **Budotitane** 85977-49-7, **Tauromustine** 86976-56-9,
Betaclamycins 87005-03-6, **Panaxytriol** 87434-82-0, **Dezaguanine Mesylate**
 87806-31-3, **Porfimer Sodium** 87810-56-8, **Fostriecin** 87860-39-7,
Fostriecin Sodium 88303-60-0, **Losoxantrone** 88303-61-1, **Losoxantrone**
Hydrochloride 89565-68-4, **Tropisetron** 89778-26-7, **Toremifene**
 89778-27-8, **Toremifene Citrate** 90357-06-5, **Bicalutamide** 90996-54-6,
Rhizoxin 92047-76-2, **Tetrachlorodecaoxide** 92118-27-9, **Fotemustine**

92788-10-8, Rogletimide 92803-82-2, Aphidicolin glycinate 94079-80-8,
 Cicaprost 95058-81-4, Gemcitabine 95734-82-0, Nedaplatin 95933-72-5,
 Amidox 96201-88-6, Brequinar Sodium 96301-34-7, Atamestane
 96346-61-1, Onapristone 96389-68-3, Crisnatol 96389-69-4, Crisnatol
 Mesylate 96392-96-0, Dexormaplatin 96892-57-8, Hepsulfam 97068-30-9,
 Elsamitrucin 97534-21-9, Merbarone 97682-44-5, Irinotecan
 97752-20-0, Droxloxfene Citrate 97919-22-7 98319-26-7, Finasteride
 98383-18-7, Ecomustine 98631-95-9, Sobuzoxane 99009-20-8,
 Pyrazoloacridine 99011-02-6, Imiquimod 99283-10-0, Molgramostim
 99614-02-5, Ondansetron 100286-90-6, Irinotecan Hydrochloride
 100324-81-0, Lisofylline 102396-24-7, Jasplakinolide 102676-31-3,
 Fadrozole Hydrochloride 102676-47-1, Fadrozole 102822-56-0,
 Mannostatin A 103222-11-3, Vapreotide 103612-80-2 104493-13-2,
 Adecypenol 105118-12-5, Piroxantrone Hydrochloride 105149-04-0,
 Osaterone 105615-58-5, Oxaunomycin 105844-41-5, Plasminogen activator
 inhibitor 106096-93-9D, Basic Fibroblast growth factor, saporin
 conjugates 106400-81-1, Lometrexol 107000-34-0, Zanoterone
 107256-99-5, Tamoxifen methiodide 107868-30-4, Exemestane 108736-35-2,
 Lanreotide 108852-90-0, Nemorubicin 109837-67-4, Cycloplatam
 110267-81-7, Amrubicin 110311-27-8, Sulofenur 110314-48-2, Adozelesin
 110690-43-2, Emitefur 110942-02-4, Aldesleukin 110942-08-0, Luprolide
 111490-36-9, Zeniplatin 111523-41-2, Enloplatin 112515-43-2, Topsentin
 112522-64-2, Acetyldinaline 112809-51-5, Letrozole 112859-71-9,
 Fluasterone 112887-68-0, Raltitrexed 112965-21-6, Calcipotriol
 114084-78-5, Ibandronic acid 114285-68-6, Lentinan sulfate
 114517-02-1, Fosquidone 114977-28-5, Taxotere 115150-59-9, Antagonist
 G 115308-98-0, Tallimustine 115566-02-4, Bistratene A 115575-11-6,
 Liarozole 115956-12-2, Dolasetron 116057-75-1, Idoxifene
 117048-59-6, Combretastatin A4 117091-64-2, Etoposide Phosphate
 118292-40-3, Tazarotene 119169-78-7, Epristeride 119413-54-6,
 Topotecan Hydrochloride 119813-10-4, Carzelesin 120287-85-6,
 Cetrorelix 120408-07-3, Lometrexol Sodium 120500-15-4, Leinamycin
 120511-73-1, Anastrozole 120685-11-2, Benzoylstauroporine
 121181-53-1, Filgrastim 121263-19-2, Calphostin C 121288-39-9,
 Loxoribine 121547-04-4, Mirimostim 122111-03-9, Gemcitabine
 Hydrochloride 122341-38-2, Temoporfin 122431-96-3 122898-63-9,
 Phenazinomycin 123040-69-7, Azasetron 123258-84-4, Itasetron
 123760-07-6, Zinostatin stimalamer 123774-72-1, Sargramostim
 123830-79-5, Teloxantrone Hydrochloride 123948-87-8, Topotecan
 124012-42-6, Galocitabine 124689-65-2D, Cryptophycin A, derivs.
 124784-31-2, Erbulozole 124904-93-4, Ganirelix 125317-39-7,
 Vinorelbine Tartrate 125392-76-9, Acylfulvene 125533-88-2, Mofarotene
 126297-39-0, Lissoclinamide 7 126443-96-7, Napavin 127984-74-1,
 Lanreotide Acetate 128505-88-4, Naphterpin 128768-09-2, Placetin A
 128768-11-6, Placetin B 129497-78-5, Verteporfin 129564-92-7, Azatoxin
 129655-21-6, Bizelesin 129731-10-8, Vorozole 130167-69-0, Pegaspargase
 130288-24-3, Duocarmycin SA 130364-39-5, Rubiginone B1 130370-60-4,
 Batimastat 131190-63-1, Saintopin 132036-88-5, Ramosetron
 132073-72-4, Tetrazomine 133432-71-0, Peldesine 134088-74-7,
 Nartograstim 134381-30-9, Conagenin 134523-84-5 134633-29-7,
 Tecogalan Sodium 134861-62-4, Dioxamycin 135257-45-3, Crambescidin 816
 135381-77-0, Flezelastine 135383-02-7, Stipiamide 135558-11-1,
 Lobaplatin 135819-69-1 135968-09-1, Lenograstim 137018-54-3,
 Okicenone 137099-09-3, Turosteride 137219-37-5, Dehydrodidemnin B
 137647-92-8, Axinastatin 1 137964-32-0 139755-79-6, Safingol
 Hydrochloride 140207-93-8, Pentosan polysulfate sodium 140703-49-7,
 Meterelin 142880-36-2, Ilomastat 144885-51-8, Sodium borocaptate
 144916-42-7, Sonermin 145124-30-7, Bisnafide dimesylate 145858-50-0,
 Liarozole Hydrochloride 146426-40-6, Flavopiridol 148317-76-4, Oracin
 148584-53-6 148717-58-2, Palauamine 148717-90-2, Squalamine
 149204-42-2, Kahalalide F 149260-80-0, Mycaperoxide B 149355-77-1,
 Lamellarin-N triacetate
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
 (pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 149633-91-0, Leptolstatin 149715-96-8, Spongistatin 1 149882-10-0,
 Lurtotecan 150829-93-9, Nisamycin 151272-78-5, Antarelix
 152923-56-3, Dacliximab 153723-34-3, Axinastatin 2 153723-35-4,
 Axinastatin 3 154039-60-8, Marimastat 154229-19-3, Abiraterone
 154248-96-1, Iroplact 154277-21-1, Cypemycin 154361-50-9, Capecitabine
 155233-30-0, Curacin A 156586-89-9, Edrecolomab 156790-85-1, Variolin
 B 156856-30-3, Cytostatin 157078-48-3, Isohomohalichondrin B
 157857-21-1, Maspin 158792-24-6, Collismycin A 158792-25-7,
 Collismycin B 168482-36-8, Cryptophycin 8 172793-30-5 173046-02-1,
 Thiocoraline 174305-65-8, Breflate 181887-82-1, Nitrullin
 188364-40-1, CARN 700 200139-38-4, Suradista 212894-59-2, Pentrozole
 246252-04-0, Lutetium texaphyrin 246252-06-2, Gadolinium texaphyrin
 284041-10-7 324740-00-3, Vitaxin 441070-87-7, 1,2,3-
 Triazolecarboxamide 441070-88-8 441070-92-4 441772-39-0,
 Isobengazole 441772-43-6, Nagrestip 441772-66-3, Vinxaltine
 441772-81-2, Sulfmosine 441774-07-8, Spicamycin D 441774-77-2,
 Solverol
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 60529-76-2, Thymopoietin
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (receptor agonists, pharmaceutical formulation further including;
 incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 79217-60-0, Cyclosporin
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
 (treatment of immunodysregulation condition caused by treatment with;
 incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 50-07-7, Mitomycin C 1397-89-3, Amphotericin B
 RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (treatment of immunodysregulation condition caused by treatment with;
 incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 120178-12-3, Telomerase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

RN 120178-12-3 HCPLUS

CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

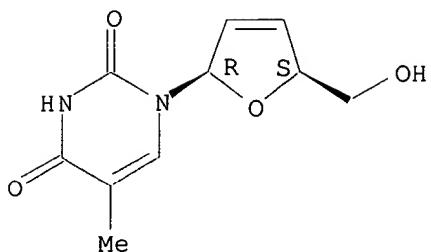
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IT 3056-17-5, d4T 30516-87-1, AZT
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

RN 3056-17-5 HCPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

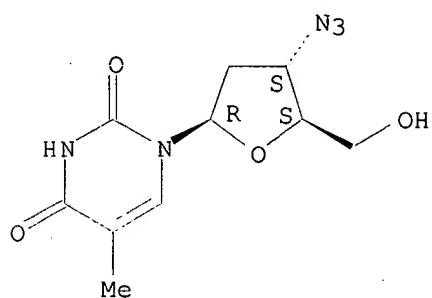
Absolute stereochemistry.



RN 30516-87-1 HCPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

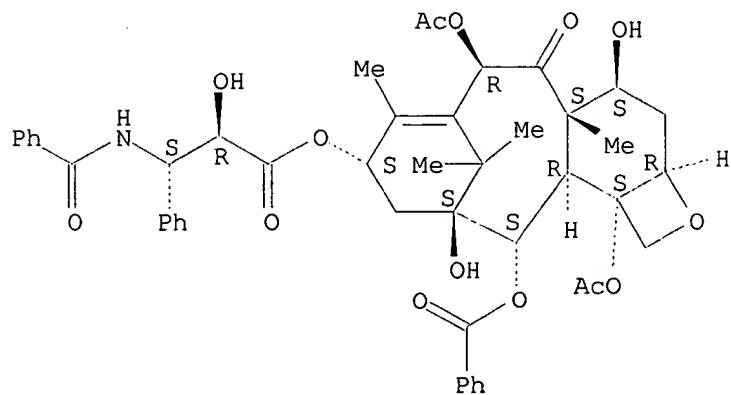
Absolute stereochemistry. Rotation (+).

IT 33069-62-4, Paclitaxel 33069-62-4D,
Paclitaxel, analogs and derivs.RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)(pharmaceutical formulation further including; incensole and
furanogermacrenes and compds. as antitumor and antimicrobial agents)

RN 33069-62-4 HCPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
(2aR,4S,4aS,6R,9S,11S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-
2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-
tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl
ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

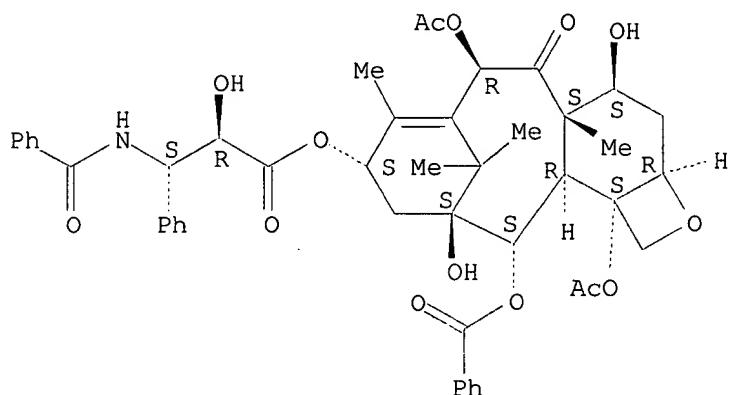


RN 33069-62-4 HCPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,

(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 3 OF 18 HCPLUS COPYRIGHT 2002 ACS

AN 2001:494413 HCPLUS

DN 135:207259

TI A quantitative assay of **telomerase** activity

AU Gan, Yuebo; Lu, Jie; Johnson, Andy; **Wientjes, M. Guillaume**; Schuller, David E.; **Au, Jessie L.-S.**

CS College of Pharmacy, The Ohio State University, Columbus, OH, 43210, USA

SO Pharmaceutical Research (2001), 18(4), 488-493

CODEN: PHREEB; ISSN: 0724-8741

PB Kluwer Academic/Plenum Publishers

DT Journal

LA English

CC 7-1 (Enzymes)

Section cross-reference(s): 14

AB Purpose: **Telomerase** is a ribonucleoprotein that extends telomeres at the ends of chromosome. Increased **telomerase** activity is assocd. with cellular immortality. The currently available assay for **telomerase**, i.e., telomeric repeat amplification protocol (TRAP), consists of 2 steps: (a) **telomerase**-mediated extension of an oligonucleotide primer by the enzyme-contg. exts. of cells and tissues, and (b) amplification of the **telomerase**-extended primer products by polymerase chain reaction (PCR) and detection of the PCR products. It is generally accepted that the current TRAP assay lacks quant. precision. The present study was to develop a quant.

telomerase assay with greater precision and sensitivity. Methods:

This new method used the primer extension method as in TRAP, plus the following modifications: (a) used a lysis buffer that yielded complete lysis of nuclei; (b) removal of PCR inhibitors by phenol/chloroform extrn. after primer extension; and (c) used primers for the internal std. that were designed to reduce their competition with the **telomerase** products for PCR. Results: The modified method showed a good correlation ($r^2 = 0.99$, $P < 0.001$) between **telomerase** amt. (expressed as total protein in cell lysate) and its activity (expressed as **telomerase** products).

Compared to the conventional TRAP, the new method (a) was more sensitive (av. of 5.5-fold in cultured cancer cells and >5.9-fold in patient tumors), (b) had a lower inter- and intra-day variability (>3-fold), and (c) showed a 2 to 4-fold broader range of linearity in the std. curve. The higher assay sensitivity further enabled the use of a non-radioactive method, i.e., ethidium bromide staining of

DNA, to detect the TRAP products, as opposed to the use of radioactive nucleotide and the more labor-intensive autoradiog. mandated by the conventional TRAP. Conclusion: We report here a quant. assay for **telomerase** activity in cultured human cancer cells and patient tumors.

ST **telomerase** detn modified TRAP assay; telomeric repeat amplification protocol modified detn **telomerase**
 IT Genetic methods
 (TRAP (telomeric repeat amplification protocol), improved; quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

IT Neoplasm
 (**telomerase** content; quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

IT 120178-12-3, **Telomerase**
 RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
 (quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (staining; quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Fu, W; J Biol Chem 1999, V274, P7264 HCPLUS
- (2) Gelmini, S; Clin Chem 1998, V44, P2133 HCPLUS
- (3) Hirose, M; Clin Chem 1998, V44, P2446 HCPLUS
- (4) Ishikawa, T; Cancer Let 1999, V141, P187 HCPLUS
- (5) Kim, N; Nucleic Acids Res 1997, V25, P2595 HCPLUS
- (6) Kim, N; Science 1994, V266, P2011 HCPLUS
- (7) Melana, S; Clin Cancer Res 1998, V4, P693 HCPLUS
- (8) Nugent, C; Curr Biol 1998, V11, P657
- (9) Piatyszek, M; Meth Cell Sci 1995, V17, P1
- (10) Shellner, L; Biotech 1998, V24, P726
- (11) Sun, D; Biochemistry 1999, V38, P4037 HCPLUS
- (12) Thurnher, D; Acta Otolaryngol 1998, V118, P423 MEDLINE
- (13) Urquidi, V; Ann Rev Med 2000, V51, P65 HCPLUS
- (14) Wright, W; Nucleic Acids Res 1995, V23, P3794 HCPLUS
- (15) Wu, Y; Clin Chim Acta 2000, V293, P199 HCPLUS

IT 120178-12-3, **Telomerase**
 RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
 (quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

RN 120178-12-3 HCPLUS

CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L65 ANSWER 4 OF 18 HCPLUS COPYRIGHT 2002 ACS
 AN 2000:880951 HCPLUS

DN 134:37011

TI Methods and compositions for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity

IN Au, Jessie L.-S.; Wientjes, Guillaume

PA USA

SO PCT Int. Appl., 97 pp.

CODEN: PIXXD2

DT Patent
 LA English
 IC ICM A61K031-00
 CC 1-6 (Pharmacology)

Section cross-reference(s): 3, 7, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000074667	A2	20001214	WO 2000-US15544	20000605 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 1999-137549P P 19990604 <--

AB Methods and compns. are provided for modulating the activity of therapeutic agents for the treatment of a cancer by administering one or more agents that (either alone or in combination) induces **telomere** damage and inhibits **telomerase** activity in the cancer cell. The method initially uses, e.g., a **telomere** damage-inducing agent such as paclitaxel, and a **telomerase** inhibitory agent such as AZT. The invention also provides methods for identifying other agents with **telomere** damage-inducing activity and/or **telomerase** inhibitory activity (as well as and compns. having such activity), for use in the treatment of cancer.

ST antitumor **telomere** damage **telomerase** inhibition;
paclitaxel AZT telomere telomerase
 antitumor

IT Nucleotides, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (analogs; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Nucleic acids

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antisense; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents

(bladder carcinoma; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents

(brain; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Bladder

(carcinoma, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Intestine, neoplasm

(colon, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

- IT Antitumor agents
 - (colon; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT DNA
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (complexes, with histones; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Drug delivery systems
 - (controlled-release; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Gelatins, biological studies
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (crosslinked; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Histones
 - Nucleoproteins
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (deoxyribonucleohistones; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Liver, neoplasm
 - (hepatoma, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Antitumor agents
 - (hepatoma; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Nucleic acid hybridization
 - (in situ, fluorescence; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Brain, neoplasm
 - Lung, neoplasm
 - Ovary, neoplasm
 - Pancreas, neoplasm
 - Testis, neoplasm
 - Uterus, neoplasm
 - (inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Antitumor agents
 - (leukemia; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Antitumor agents
 - (lung; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Antitumor agents
 - (mammary gland; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
- IT Antitumor agents
 - Apoptosis
 - Cytotoxic agents
 - Drug delivery systems

Drug interactions
Drug resistance
Drug screening
Extraction
Fluorescent substances
Hyperplasia
Hypertrophy
Nucleic acid hybridization
PCR (polymerase chain reaction)
Radiotherapy
Telomeres (chromosome)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Primers (nucleic acid)
Probes (nucleic acid)
Radionuclides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug delivery systems
(microparticles; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug delivery systems
(nanoparticles; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Mammary gland
Pharynx
Prostate gland
(neoplasm, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(ovary; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(pancreas; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(prostate gland; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug delivery systems
(sustained-release; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug interactions
(synergistic; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Genetic methods
(**telomere** amt. and length assay (TALA); methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Genetic methods
(**telomeric** repeat amplification protocol (TRAP); methods and compns. for modulating antitumor drug activity through **telomere**

damage, agent identification method, and method for detecting **telomerase activity**)

IT Antitumor agents
(testis; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT Antitumor agents
(uterus; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT 120178-12-3, **Telomerase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT 3056-17-5, d4T 15663-27-1, Cisplatin
30516-87-1, AZT 33069-62-4, Paclitaxel
33069-62-4D, Paclitaxel, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT 9055-67-8 169592-56-7, Caspase 3
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT 67-66-3, Chloroform, miscellaneous 108-95-2, Phenol, miscellaneous
123-51-3, Isoamyl alcohol
RL: MSC (Miscellaneous)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT 117490-04-7 125478-80-0 167976-62-7 167976-64-9 312653-01-3
312653-02-4 312653-03-5 312653-04-6
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT 9075-08-5, Restriction endonuclease 81295-18-3 81295-20-7, Restriction endonuclease HhaI 81295-23-0, Restriction endonuclease Hinfl
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

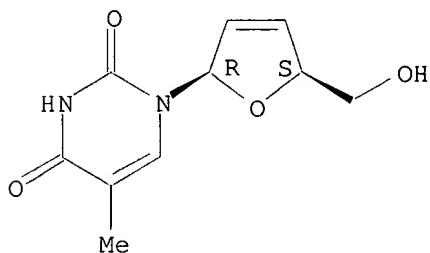
IT 119456-37-0 156960-31-5, DNA (universal primer BB22) 182036-73-3
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase activity**)

IT 120178-12-3, **Telomerase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for

detecting telomerase activity)
RN 120178-12-3 HCPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

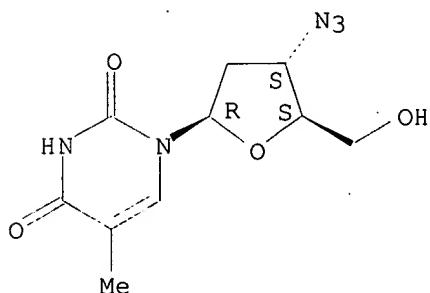
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 3056-17-5, d4T 30516-87-1, AZT
33069-62-4, Paclitaxel 33069-62-4D,
Paclitaxel, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through telomere damage, agent identification method, and method for detecting telomerase activity)
RN 3056-17-5 HCPLUS
CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



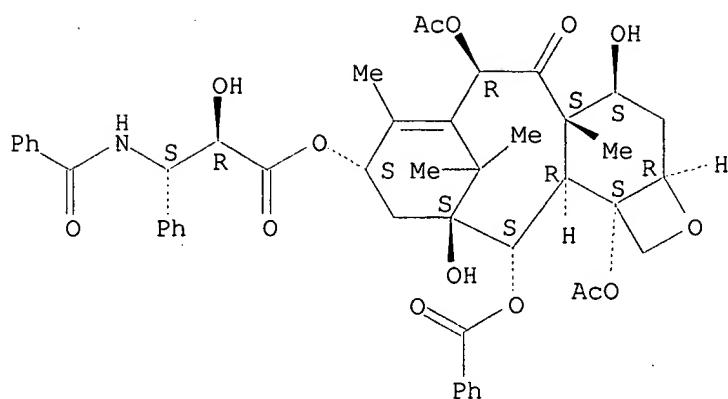
RN 30516-87-1 HCPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCPLUS
CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
(2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS)-6, 12b-bis(acetoxy)-12-(benzoyloxy)-
2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-4a, 8, 13, 13-
tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-9-yl
ester, (.alpha.R, .beta.S)- (9CI) (CA INDEX NAME)

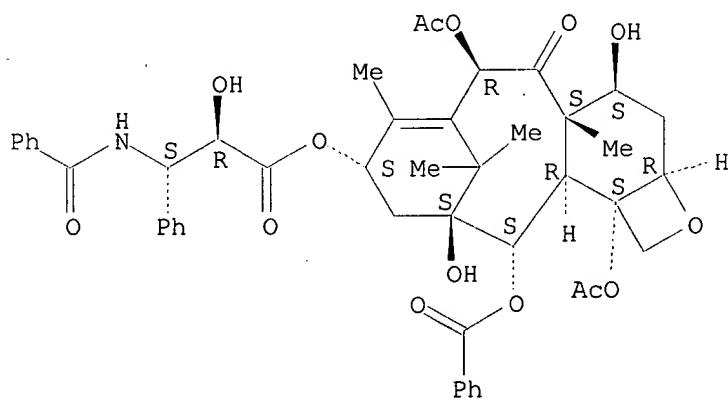
Absolute stereochemistry. Rotation (-).



RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
 (2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS)-6, 12b-bis(acetyloxy)-12-(benzoyloxy)-
 2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-4a, 8, 13, 13-
 tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-9-yl
 ester, (.alpha.R, .beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:756717 HCAPLUS

DN 133:305589

TI Platinum complexes for the treatment of cancer and AIDS

IN Shaw, Jiajiu

PA Unitech Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA English

IC C07F015-00; A61K031-28

CC 1-6 (Pharmacology)

Section cross-reference(s): 63, 78

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000063219	A1	20001026	WO 2000-US10881	20000420 <-- W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
 LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
 SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6458832 B1 20021001 US 2000-552167 20000418 <--
 US 2002165204 A1 20021107 US 2002-133117 20020425 <--
 PRAI US 1999-130530P P 19990421 <--
 US 2000-552167 A3 20000418

OS MARPAT 133:305589

AB The synthesis and use of a series of platinum **complexes** for the treatment of **cancer** and AIDS are disclosed. The platinum **complexes** include cisplatin analogs, carboplatin analogs, and cisplatin and folic acid compds.

ST platinum **complex** prepns **cancer** AIDS treatment;
 cisplatin analog **cancer** AIDS treatment; carboplatin analog **cancer** AIDS treatment; folate cisplatin compd **cancer** AIDS treatment

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Ad E1B; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (BRCA1; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Bad gene Harakiri; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Bak; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Bax; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Bid; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Bik; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Bim; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(C-CAM; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (ICE-CED3 protease; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (MMAC1; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (RB1; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (TP53; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT Phosphatidylserines
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (and phosphatidylserine carboxylates; platinum complexes; platinum complexes for treatment of **cancer** and AIDS)

IT Drug delivery systems
(capsules; platinum complexes for treatment of **cancer** and AIDS)

IT Antitumor agents
(colon carcinoma; platinum complexes for treatment of **cancer** and AIDS)

IT Intestine, neoplasm
Intestine, neoplasm
(colon, carcinoma, inhibitors; platinum complexes for treatment of **cancer** and AIDS)

IT Intestine, neoplasm
Intestine, neoplasm
(colon, inhibitors; platinum complexes for treatment of **cancer** and AIDS)

IT Antitumor agents
(colon; platinum complexes for treatment of **cancer** and AIDS)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (cytokine; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT DNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (damage, DNA damaging agents; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT Adeno-associated virus
Adenoviridae
Herpesviridae
Vaccinia virus
(expression construct; platinum complexes for treatment of **cancer** and AIDS, and use with other agents)

IT DNA

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genomic; platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Liver, neoplasm
Liver, neoplasm
(hepatoma, inhibitors; platinum complexes for treatment of cancer and AIDS)

IT Antitumor agents
(hepatoma; platinum complexes for treatment of cancer and AIDS)

IT Lung, neoplasm
Lung, neoplasm
Skin, neoplasm
Skin, neoplasm
(inhibitors; platinum complexes for treatment of cancer and AIDS)

IT Drug delivery systems
(injections, i.v.; platinum complexes for treatment of cancer and AIDS)

IT Drug delivery systems
(injections, s.c.; platinum complexes for treatment of cancer and AIDS)

IT Drug delivery systems
(injections; platinum complexes for treatment of cancer and AIDS)

IT Gamma ray
(irradn.; platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Antitumor agents
Antitumor agents
(lung; platinum complexes for treatment of cancer and AIDS)

IT Antitumor agents
(mammary gland; platinum complexes for treatment of cancer and AIDS)

IT Mammary gland
Mammary gland
Prostate gland
Prostate gland
(neoplasm, inhibitors; platinum complexes for treatment of cancer and AIDS)

IT Drug delivery systems
(oral; platinum complexes for treatment of cancer and AIDS)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(p16; platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(p21; platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(p73; platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Drug delivery systems
(parenterals; platinum complexes for treatment of

cancer and AIDS)

IT Anti-AIDS agents

Antitumor agents

 Drug delivery systems

 (platinum complexes for treatment of cancer and AIDS)

IT **Chemotherapy**

 Gene therapy

 Microwave

 Radiotherapy

 UV radiation

 (platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Nucleic acids

 Promoter (genetic element)

 cDNA

 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

 (platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Amino acids, biological studies

 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 (platinum complexes; platinum complexes for treatment of cancer and AIDS)

IT **Antitumor** agents

 (prostate gland; platinum complexes for treatment of cancer and AIDS)

IT **Antitumor** agents

Antitumor agents

 (skin; platinum complexes for treatment of cancer and AIDS)

IT **Antitumor** agents

 (squamous cell carcinoma; platinum complexes for treatment of cancer and AIDS)

IT Surgery

 (tumor resection; platinum complexes for treatment of cancer and AIDS)

IT Radiotherapy

 (x-ray; platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Gene

 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

 (zakl; platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT Amino acids, biological studies

 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 (.beta.-, platinum complexes; platinum complexes for treatment of cancer and AIDS)

IT 296763-29-6P 296763-30-9P 302548-95-4P

 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 (platinum complexes for treatment of cancer and AIDS)

IT 7440-06-4D, Platinum, complexes, biological studies

 15663-27-1, Cisplatin 41575-94-4, Carboplatin 74868-20-5 302547-77-9

 302549-67-3

 RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(platinum complexes for treatment of cancer and AIDS)

IT 50-18-0, Cyclophosphamide 50-76-0, Dactinomycin 51-21-8, 5-Fluorouracil 51-75-2, Mechlorethamine 52-53-9, Verapamil 55-98-1, Busulfan 57-22-7, Vincristin 59-05-2, Methotrexate 148-82-3, Melphalan 305-03-3, Chlorambucil 518-28-5, Podophyllotoxin 671-16-9, Procarbazine 865-21-4, Vinblastin 1404-00-8, Mitomycin 3778-73-2, Ifosfamide 7689-03-4, Camptothecin 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 13010-20-3, Nitrosurea 14913-33-8, Transplatin 18378-89-7, Plicamycin 20830-81-3, Daunorubicin 23214-92-8, Doxorubicin 30516-87-1, AZT 33069-62-4, Taxol 33419-42-0, Etoposide

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(platinum complexes for treatment of cancer and AIDS, and use with other agents)

IT 60-18-4, L-Tyrosine, reactions 112-24-3 10025-99-7, Potassium tetrachloroplatinum (II) 25148-93-0, N,N'-Bis(2-dimethylaminoethyl)oxamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; platinum complexes for treatment of cancer and AIDS)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Hydes; US 4228090 A 1980 HCPLUS
- (2) McClay; US 5844001 A 1998 HCPLUS
- (3) Miller; Inorganica Chimica Acta 1999, V290(2), P237 HCPLUS
- (4) Shaw; US 5922689 A 1999 HCPLUS

IT 30516-87-1, AZT 33069-62-4, Taxol

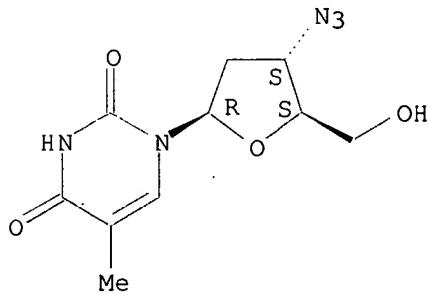
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(platinum complexes for treatment of cancer and AIDS, and use with other agents)

RN 30516-87-1 HCPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

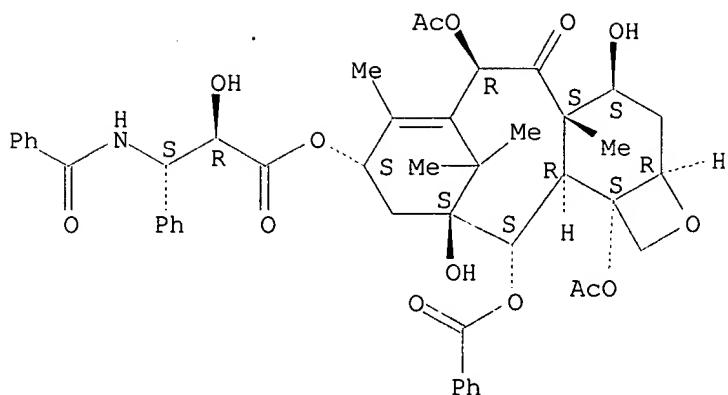
Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS)-6, 12b-bis(acetoxy)-12-(benzoyloxy)-2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-4a, 8, 13, 13-tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-9-yl ester, (.alpha.R, .beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:535357 HCAPLUS

DN 133:144904

TI Caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compounds so identified, and pharmaceutical compositions

IN Weber, Eckard; Tseng, Ben Y.; Drewe, John; Cai, Sui Xiong

PA Cytovia, Inc., USA

SO PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM G01N033-48

ICS C12Q001-00

CC 1-6 (Pharmacology)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000045165	A1	20000803	WO 2000-US2329	20000201 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP	1151295	A1	20011107	EP 2000-907081	20000201 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1999-118102P	P	19990201		<--
	US 1999-454595	A	19991207		<--
	WO 2000-US2329	W	20000201		
AB	A method for identifying potentially therapeutically effective antineoplastic compds. comprises detg. the ability of test compds. to act as activators of the caspase cascade in viable cultured eukaryotic cells having an intact cell membrane and expressing a cancer phenotype, wherein a test compd. that enhances caspase cascade activity is detd. to have potential therapeutic efficacy. The method specifically differentiates activators of the caspase cascade from non-specific cell poisons. A therapeutic method useful to modulate in vivo apoptosis or in vivo neoplastic disease, comprising administering to a subject an effective amt. of a				

compd. identified as a caspase cascade activator, is provided. Compds., pharmaceutical compns. and a kit for performing the therapeutic method are further provided.

ST antitumor agent screening caspase cascade

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(BRCA1; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Brca 2; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Animal cell line
(HL-60; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
Antitumor agents
(Hodgkin's disease inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(Kaposi's sarcoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Animal cell line
(PC-3; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Animal cell line
(T47D; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(Wilms' tumor; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Kidney, neoplasm
Kidney, neoplasm
(Wilms', inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Animal cell line
(ZR-75-1; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(acute lymphocytic leukemia; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Nervous system
(ataxia telangiectasia, ataxia telangiectasia mutated cells; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bcl-2; caspase cascade-based methods for identifying therapeutically

effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bcr-c-abl; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(bladder carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
Antitumor agents
(brain; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Carcinoid
(carcinoid carcinoma inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Adrenal cortex, neoplasm
Bladder
Bladder
Esophagus
Esophagus
Head
Head
Lung, neoplasm
Lung, neoplasm
Mammary gland
Mammary gland
Neck, anatomical
Neck, anatomical
Ovary, neoplasm
Ovary, neoplasm
Pancreas, neoplasm
Pancreas, neoplasm
Prostate gland
Prostate gland
Stomach, neoplasm
Stomach, neoplasm
Testis, neoplasm
Testis, neoplasm
Thyroid gland, neoplasm
Thyroid gland, neoplasm
(carcinoma, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Animal tissue culture
Antitumor agents
Apoptosis
Chemiluminescent substances
Color formers
Drug delivery systems
Drug screening
Fluorescent substances
Mutation

Permeation enhancers**Polycythemia vera**

(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Natural products**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **p53 (protein)**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Multidrug resistance**

(cells; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor agents**

(cervix **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Uterus, neoplasm**

Uterus, neoplasm
(cervix, **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Chorion**

Chorion
(**choriocarcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor agents**

(**choriocarcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor agents**

(chronic lymphocytic **leukemia**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor agents**

(chronic myelocytic **leukemia**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor agents**

(colon **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Intestine, neoplasm**

Intestine, neoplasm
(colon, **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor agents**

(endometrium **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Uterus, neoplasm**

Uterus, neoplasm

- (endometrium, **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(esophagus **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Mycosis**
Mycosis
(fungoides, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
Antitumor agents
(genitourinary tract **tumor** inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(hairy cell leukemia; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(head **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT Brain, **neoplasm**
Brain, **neoplasm**
Hodgkin's disease
Hodgkin's disease
Skin, **neoplasm**
Skin, **neoplasm**
(inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT Pancreatic islet of Langerhans
Pancreatic islet of Langerhans
(**insulinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(**insulinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(lung **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(lung small-cell **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(mammary gland **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(mammary gland; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)
- IT **Antitumor** agents
(melanoma; caspase cascade-based methods for identifying

therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT DNA repair
(mismatch, DNA mismatch repair-deficient cells; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(multiple myeloma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Mycosis
Skin, neoplasm
Skin, neoplasm
(mycosis fungoides, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(mycosis fungoides; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(myelogenous leukemia, acute; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(neck carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Mammary gland
Mammary gland
Prostate gland
Prostate gland
(neoplasm, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Nerve, neoplasm
Nerve, neoplasm
(neuroblastoma, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(neuroblastoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(non-Hodgkin's lymphoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Bone, neoplasm
(osteosarcoma, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
(ovary carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Cyclin dependent kinase inhibitors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p16INK4; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

- IT **Antitumor agents**
(pancreas carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Macroglobulins**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(primary macroglobulinemia; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Drug delivery systems**
(prodrugs; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
(prostate carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
(prostate gland; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Kidney, neoplasm**
Kidney, neoplasm
(renal cell carcinoma, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
(renal cell carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
(rhabdomyosarcoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
(sarcoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
Antitumor agents
(skin; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Lung, neoplasm**
Lung, neoplasm
(small-cell carcinoma, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
(soft tissue sarcoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Animal tissue**
Animal tissue
(soft, sarcoma, inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)
- IT **Antitumor agents**
(stomach carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents,

compds. so identified, and pharmaceutical compns.)

IT Drug interactions
 (synergistic; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
 (testis carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Platelet (blood)
 (thrombocytosis, essential; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Antitumor agents
 (thyroid gland carcinoma; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT Urogenital tract
 Urogenital tract
 (tumor inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT 50-07-7, Mitomycin C 50-18-0, Cyclophosphamide 50-32-8, Benzo[a]pyrene, biological studies 50-44-2, Mercaptopurine 50-76-0, Actinomycin D 51-21-8, 5-Fluorouracil 51-28-5, 2,4-Dinitrophenol, biological studies 51-75-2, Mechlorethamine 53-79-2, Puromycin 54-05-7, Chloroquine 54-31-9 54-62-6, Aminopterin 54-64-8, Thimerosal 54-92-2, Iproniazid 55-98-1, Busulfan 56-12-2, .gamma.-Aminobutyric acid, biological studies 56-25-7, Cantharidin 56-49-5, 3-Methylcholanthrene 56-75-7, Chloramphenicol 57-24-9, Strychnine 57-62-5 58-00-4, Apomorphine 59-05-2, Methotrexate 60-38-8, Strophantidin acetate 62-74-8, Sodium fluoroacetate 64-77-7, Tolbutamide 64-86-8, Colchicine 66-27-3, Methylmethane sulfonate 66-28-4, Strophantidin 66-76-2, Dicoumarol 66-81-9, Cycloheximide 71-63-6, Digitoxin 73-31-4, Melatonin 76-28-8, Sarmentogenin 81-23-2, Dehydrocholic acid 82-10-0D, derivs. 83-79-4, Rotenone 83-89-6, Quinacrine 84-17-3, Dienestrol 84-65-1, Anthraquinone 90-65-3, Penicillic acid 97-44-9, Acetarsol 97-77-8, Disulfiram 100-33-4, Pentamidine 115-02-6, Azaserine 121-19-7, Roxarsone 121-54-0, Benzethonium chloride 123-03-5, Cetylpyridinium chloride 126-07-8, Griseofulvin 127-07-1, Hydroxyurea 129-20-4, Oxyphenbutazone 136-77-6, Hexylresorcinol 143-67-9, Vinblastine sulfate 147-94-4, Cytarabine 148-82-3, Melphalan 152-11-4, Verapamil hydrochloride 154-42-7, Thioguanine 302-27-2, Aconitine 305-03-3, Chlorambucil 306-37-6 314-03-4, Pimethixene 316-42-7, Emetine hydrochloride 320-67-2, 5-Azacytidine 446-86-6, Azathioprine 474-07-7 476-32-4, Chelidonine 481-39-0, Juglone 482-53-1, Osajin 483-18-1, Emetine 484-29-7, Dictamine 498-95-3, Nipecotic acid 508-64-5D, Strophantidinic acid, derivs. 508-77-0, Cymarin 514-42-1 518-28-5, Podophyllotoxin 518-28-5D, Podophyllotoxin, derivs. 518-75-2, Citrinin 543-90-8, Cadmium acetate 548-19-6, Isoginkgetin 548-62-9, Gentian violet 564-25-0, Doxycycline 572-03-2, Pomiferin 595-05-1, Calycanthine 630-56-8, Hydroxyprogesterone caproate 630-60-4, Ouabain 865-21-4, Vinblastine 979-32-8, Estradiol valerate 1134-47-0, Baclofen 1254-85-9, Cedrelone 1397-89-3, Amphotericin B 1397-94-0, Antimycin a 1400-61-9, Nystatin 1404-88-2, Tyrothricin 1405-20-5, Polymyxin B sulfate 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1449-05-4, 18.alpha.-Glycyrrhetic acid 1915-67-9D, Mexicanolide, derivs. 1951-25-3, Amiodarone 2524-37-0 2582-86-7, Atrovenetin 2631-92-7 2752-65-0, Gambogic acid 2752-65-0D, Gambogic acid, derivs. 2753-30-2D, Gedunin, derivs. 3094-09-5, 5-Fluoro-5'-deoxyuridine 3902-71-4, Trioxsalen 4342-03-4, Dacarbazine 4360-12-7, Ajmaline 5490-46-0, Lonchocarpic acid diacetate 5914-82-9 5996-03-2

6385-58-6, Bithionolate sodium 7299-11-8, Psoromic acid 7689-03-4, Camptothecin 10410-83-0, Anthothecol 12244-57-4 12542-36-8, Gossypol-acetic acid 14923-17-2, Arcaine sulfate 15663-27-1, Cisplatin 16561-29-8, Phorbol myristate acetate 17046-60-5 17560-51-9, Metolazone 17617-45-7, Picrotoxinin 17754-44-8, Atractyloside 18000-24-3, 7-Chlorokynurenic acid 18883-66-4, Streptozocin 20004-62-0D, Resistomycin, derivs. 20315-68-8 20830-75-5, Digoxin 21105-15-7, Obtusaquinone 22144-77-0, Cytochalasin d 23214-92-8, Doxorubicin 23590-85-4 24280-93-1, Mycophenolic acid 26213-95-6 26927-01-5 28028-68-4, Crassin acetate 28789-35-7 28860-95-9, Carbidopa 30516-87-1, Zidovudine 30850-52-3, Decahydrogambogic acid 32476-67-8, Periplocymarin 33069-62-4, Taxol 33419-42-0, Etoposide 34157-83-0, Celastrol 41575-94-4, Carboplatin 42193-38-4 49842-07-1, Tobramycin sulfate 53179-09-2, Sisomicin sulfate 53179-11-6, Loperamide 62996-74-1, Staurosporine 64964-48-3, Sericetin diacetate 65059-09-8 66451-22-7, Chukrasin 69505-55-1 70904-56-2D, Kyotorphin, derivs. 70904-57-3D, derivs. 85967-06-2D, Rhodomyrt toxin, derivs. 141543-62-6 161804-20-2, Benzamil hydrochloride 286935-58-8 286935-60-2 287103-76-8 287103-77-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT 186322-81-6, Caspase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT 25535-16-4, Propidium iodide

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT 7440-70-2, Calcium, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(malignant hypercalcemia inhibitors; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

IT 211918-90-0 220846-54-8 287376-78-7 287376-79-8 287376-80-1

287376-81-2 287376-82-3 287376-83-4 287376-84-5

RL: PRP (Properties)

(unclaimed sequence; caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and pharmaceutical compns.)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fulda; Cancer Research 1997, V57, P4656

(2) Mohr; Proc Natl Acad Sci USA 1998, V95, P5045 HCPLUS

(3) Qi; Oncogene 1997, V15, P1207 HCPLUS

IT 30516-87-1, Zidovudine 33069-62-4,

Taxol

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

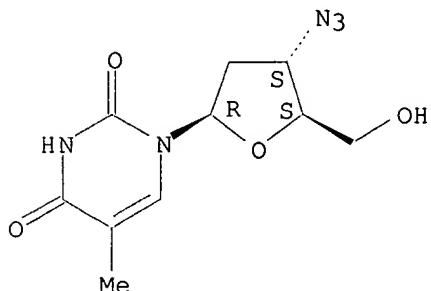
(caspase cascade-based methods for identifying therapeutically effective antineoplastic agents, compds. so identified, and

pharmaceutical compns.)

RN 30516-87-1 HCPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

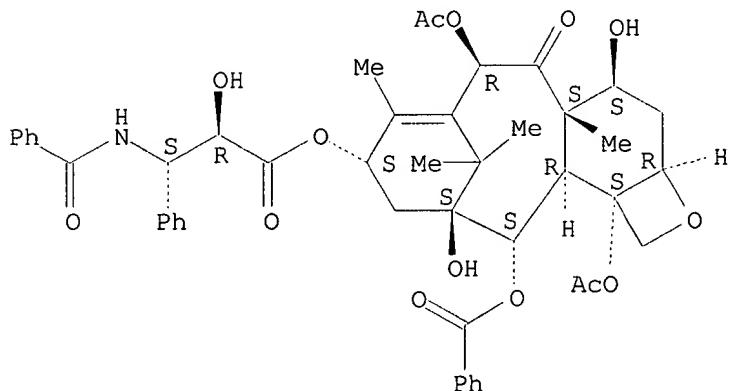
Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCPLUS

CN Benzene propanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 7 OF 18 HCPLUS COPYRIGHT 2002 ACS

AN 2000:438177 HCPLUS

DN 133:305333

TI Cell death in paclitaxel-dependent Chinese hamster ovary cells is initiated by the loss of telomeric DNA repeats

AU Multani, Asha S.; Chandra, Joya; McConkey, David J.; Sen, Subrata; Cabral, Fernando; Pathak, Sen

CS Departments of Cancer Biology, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 77030, USA

SO Oncology Research (1999), 11(10), 455-460
CODEN: ONREE8; ISSN: 0965-0407

PB Cognizant Communication Corp.

DT Journal

LA English

CC 1-6 (Pharmacology)

Section cross-reference(s): 13, 14

AB We have reported earlier that cell death in a metastatic murine melanoma cell line induced by paclitaxel and its water-sol. conjugates is

mediated through the extensive erosion of **telomeric** repeats. The purpose of this study was to investigate if loss of **telomeric** repeats was also involved in cell death of Tax-18 and Tax-2-4, two **paclitaxel**-requiring mutant Chinese hamster ovary (CHO) cell lines. Tax-18 and Tax-2-4 cells were grown in **paclitaxel**-free culture medium for 24, 48, 72, and 96 h at 37.degree.C and then harvested for cytol. preps. Control cultures of both cell lines were grown in **paclitaxel**-supplemented medium and harvested simultaneously. We found that the frequency of **telomeric** assocns. in metaphase preps. was increased with the duration of **paclitaxel**-depleted culture; Tax-18 cells showed a higher incidence (33.0%) of endoreduplicated metaphases at 24 h of **paclitaxel**-depleted culture than did Tax-2-4 cells, in which endoreduplicated metaphases were rare; the frequency of polyploid cells was increased after 48, 72, and 96 h of **paclitaxel**-depleted culture for Tax-18 relative to that for Tax-2-4 cells; both cell lines showed redns. in **telomeric** signals at chromosomal termini, but not in the interphase nuclei; and both cell lines had shorter terminal **telomeric** restriction fragments after culture in **paclitaxel**-depleted medium. These results support our earlier observations and indicate that redn. of **telomeric** repeats is involved in G2/M cell arrest (endoreduplication) followed by severe DNA fragmentation, and then cell death of two CHO mutant cell lines that require **paclitaxel** for cell division.

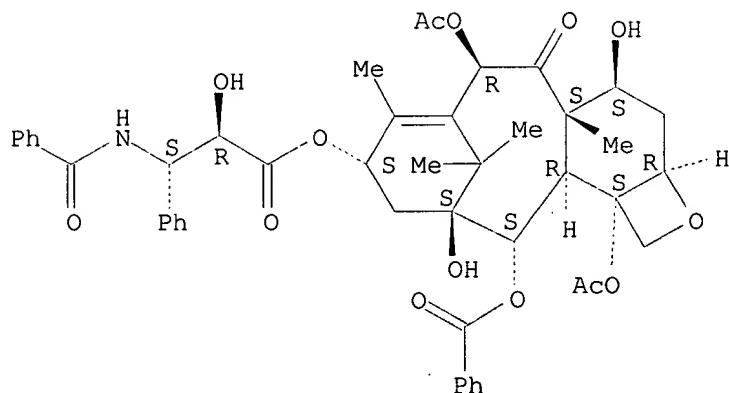
- ST cell death **paclitaxel telomere** DNA repeat
 IT Interphase (cell cycle)
 (G2-phase; cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)
 IT Cell death
 Telomeres (chromosome)
 (cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)
 IT Mitosis
 (metaphase; cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)
 IT Repetitive DNA
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (**telomeric**; cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)
 IT 33069-62-4, **Paclitaxel**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)
 IT 120178-12-3, **Telomerase**
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD

- RE
- (1) Amoss, M; Advances in swine in biomedical research 1996, P319
 - (2) Bacchetti, S; Int J Oncol 1995, V7, P31
 - (3) Blackburn, E; Telomeres and telomerase, Ciba Foundation Symposium Series 1997, V211, P2 HCPLUS
 - (4) Cabral, F; J Cell Biol 1983, V97, P22 HCPLUS
 - (5) Fossel, M; JAMA 1998, V279, P1732 MEDLINE
 - (6) Harley, C; Nature 1990, V345, P458 HCPLUS
 - (7) Ishibashi, T; Proc Natl Acad Sci USA 1998, V95, P4219 HCPLUS

- (8) Kipling, D; *The telomere* 1995
 (9) Lee, C; *Cytogenet Cell Genet* 1993, V63, P156 HCPLUS
 (10) Meyne, J; *Proc Natl Acad Sci USA* 1989, V89, P7049
 (11) Mukhopadhyay, T; *Oncogene* 1998, V17, P901 HCPLUS
 (12) Multani, A; *Anticancer Res* 1996, V16, P3435 MEDLINE
 (13) Multani, A; *Anticancer Res* 1997, V17, P4269 HCPLUS
 (14) Multani, A; *Oncol Rep* 1999, V6, P39 HCPLUS
 (15) Pathak, S; *Anticancer Res* 1995, V15, P2549 MEDLINE
 (16) Pathak, S; *Arch Zootec* 1996, V45, P141 HCPLUS
 (17) Pathak, S; *Cytobiois* 1998, V93, P141 HCPLUS
 (18) Pathak, S; *In Vivo* 1994, V8, P843 MEDLINE
 (19) Pathak, S; *Int J Oncol* 1994, V4, P323
 (20) Pathak, S; *Int J Oncol* 1997, V11, P53
 (21) Pathak, S; *J Reprod Med* 1976, V17, P25 MEDLINE
 (22) Pathak, S; *Oncol Rep* 1998, V5, P373 HCPLUS
 (23) Sambrook, J; *Molecular cloning: A laboratory manual* 1989
 (24) Schibler, M; *J Cell Biol* 1986, V102, P1522 HCPLUS
 (25) Vaziri, H; *Proc Natl Acad Sci USA* 1994, V91, P9857 HCPLUS
IT 33069-62-4, Paclitaxel
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cell death in paclitaxel-dependent Chinese hamster ovary cells is initiated by loss of telomeric DNA repeats)
RN 33069-62-4 HCPLUS
CN Benzene propanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetoxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



- IT 120178-12-3, Telomerase**
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (cell death in paclitaxel-dependent Chinese hamster ovary cells is initiated by loss of telomeric DNA repeats)
RN 120178-12-3 HCPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

TI Chemically induced intracellular hyperthermia for therapeutic and diagnostic use

IN Bachynsky, Nicholas; Roy, Woodie

PA Texas Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 149 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-06

CC 1-12 (Pharmacology)

Section cross-reference(s): 9, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000006143	A1	20000210	WO 1999-US16940	19990727 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2337690	AA	20000210	CA 1999-2337690	19990727 <--
	AU 9951318	A1	20000221	AU 1999-51318	19990727 <--
	AU 750313	B2	20020718		
	EP 1098641	A1	20010516	EP 1999-935949	19990727 <--
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PRAI US 1998-94286P P 19980727 <--
WO 1999-US16940 W 19990727 <--

AB Therapeutic pharmacol. agents and methods are disclosed for chem. induction of intracellular hyperthermia and/or free radicals for the diagnosis and treatment of infections, **malignancy**, and other medical conditions. A process and **compn.** are provided for the diagnosis or killing of **cancer** cells and inactivation of susceptible bacterial, parasitic, fungal, and viral pathogens by chem. generating heat, and/or free radicals and/or hyperthermia-inducible immunogenic determinants by using mitochondrial uncoupling agents, esp. 2,4-dinitrophenol, and their **conjugates**, either alone or in **combination** with other drugs, hormones, cytokines and radiation.

ST intracellular hyperthermia mitochondria uncoupler diagnosis therapy; dinitrophenol intracellular hyperthermia diagnosis therapy; **cancer** infection diagnosis therapy intracellular hyperthermia; **antitumor** antiinfective intracellular hyperthermia mitochondria uncoupler

IT Hepatitis
(C; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Imaging
(IR; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Lichen
(acids; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT **Antitumor** agents
(**adenocarcinoma**; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Cell cycle
(agents specific for; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibiotics
(aminoglycoside; chem. induced intracellular hyperthermia for

diagnostic and therapeutic use, and use with other agents)

IT Artery
(angioplasty; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotic; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Macrolides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiviral; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Infection
(bacterial; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Mammary gland
(carcinoma; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Alkylating agents, biological
Anti-infective agents
Anti-ischemic agents
Antibacterial agents
Antitumor agents
Antiviral agents
Combinatorial chemistry
Combinatorial library
Cyanine dyes
Diagnosis
Echinococcus multilocularis
Fungicides
Human immunodeficiency virus
Hyperthermia (therapeutic)
Infection
Lyme disease
Neoplasm
Parasiticides
Positron-emission tomography
Radiotherapy
Surgery
(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Cytokines
Histones
Interleukin 1
Interleukin 10
Interleukin 2
Interleukin 4
Leukotrienes
Nucleoside analogs
Oligosaccharides, biological studies
Polyenes
Polyethers, biological studies
Prostaglandins

Sulfonamides
Tetracyclines
Thromboxanes
Thyroid hormones
 Tumor necrosis factors
Ubiquinones
Uncoupling protein
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Heat-shock proteins
Radicals, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Alcohols, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (fluoro; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Neuroglia
 (glioma; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Hormones, animal, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hormone agonists; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (humanized, to HER-2/neu; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Liver, disease
 (hydatid; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Fungi
Parasite
 (infection; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibiotics
Ionophores
 (ionophorous antibiotic uncouplers; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Drug delivery systems
 (liposomes; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibiotics
 (macrolide; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Metabolism
 (metabolic rate; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Mitochondria
 (mitochondrial uncoupling agents; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other

agents)
IT neu (receptor)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(monoclonal humanized antibodies to; chem. induced intracellular
hyperthermia for diagnostic and therapeutic use, and use with other
agents)

IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(monoclonal, to HER-2/neu; chem. induced intracellular hyperthermia for
diagnostic and therapeutic use, and use with other agents)

IT Fatty acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(monounsatd.; chem. induced intracellular hyperthermia for diagnostic
and therapeutic use, and use with other agents)

IT Prostate gland
Prostate gland
(neoplasm, inhibitors; chem. induced intracellular
hyperthermia for diagnostic and therapeutic use, and use with other
agents)

IT Alkaloids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(podophyllin and plant; chem. induced intracellular hyperthermia for
diagnostic and therapeutic use, and use with other agents)

IT Fatty acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(polyunsatd.; chem. induced intracellular hyperthermia for diagnostic
and therapeutic use, and use with other agents)

IT Antitumor agents
(prostate gland; chem. induced intracellular hyperthermia for
diagnostic and therapeutic use, and use with other agents)

IT Drugs
(sulfa drugs; chem. induced intracellular hyperthermia for diagnostic
and therapeutic use, and use with other agents)

IT Drug interactions
(synergistic; chem. induced intracellular hyperthermia for
diagnostic and therapeutic use, and use with other agents)

IT Animal tissue
(target tissue metabolic rate; chem. induced intracellular hyperthermia
for diagnostic and therapeutic use, and use with other agents)

IT Fatty acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(unsatd.; chem. induced intracellular hyperthermia for diagnostic and
therapeutic use, and use with other agents)

IT Infection
(viral; chem. induced intracellular hyperthermia for diagnostic and
therapeutic use, and use with other agents)

IT Interferons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(.alpha.-2a; chem. induced intracellular hyperthermia for diagnostic
and therapeutic use, and use with other agents)

IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.alpha.-2b; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.alpha.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Lactams

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.beta.-, antibiotics; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibiotics

(.beta.-lactam; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.beta.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.gamma.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT 9034-40-6, Luteinizing hormone-releasing factor

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(agonists; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT 50-18-0	50-49-7	50-65-7	50-76-0, Actinomycin D	51-21-8	51-28-5,	
biological studies		51-28-5D, derivs. and conjugates		51-48-9,		
biological studies	55-98-1	51-75-2	52-24-4	53-03-2	53-79-2	54-42-2
	56-53-1	56-75-7	56-85-9, L-Glutamine,	biological studies		
57-22-7	57-62-5	57-63-6	57-92-1,	biological studies	58-22-0	
58-27-5	59-05-2D, analogs	59-87-0	60-33-3, 9,12-Octadecadienoic acid			
	(9Z,12Z)-,	60-54-8D, derivs.	61-32-5	61-33-6,		
biological studies	61-68-7	61-73-4	63-74-1	63-74-1D,	derivs.	
65-49-6	66-79-5	67-20-9	67-45-8	68-35-9	68-81-5	70-00-8
72-14-0	74-81-7, biological studies	76-43-7	79-43-6D, nitrobenzene			
derivs	79-57-2	87-86-5	91-40-7	92-82-0D, Phenazine,	derivs.	
97-18-7	100-02-7, biological studies	102-82-9	103-82-2D,			
Benzeneacetic acid, derivs.	112-80-1,	9-Octadecenoic acid (9Z)-,				
biological studies	112-86-7	114-07-8, Erythromycin	116-44-9			
125-84-8	126-07-8	127-33-3	147-85-3, L-Proline,	biological studies		
147-94-4	148-79-8	148-82-3	154-21-2	154-42-7	154-93-8	299-11-6
302-79-4,	Retinoic acid	305-03-3	320-67-2	370-86-5	389-08-2	
439-14-5	443-48-1	459-86-9	463-40-1	479-20-9	484-49-1	506-26-3
506-32-1	518-28-5	519-23-3	520-85-4	521-52-8	527-17-3	
529-37-3D,	4(1H)-Quinolinone,	derivs.	530-78-9	531-82-8	548-62-9	
555-60-2	564-25-0	593-38-4	595-33-5	606-06-4	630-56-8	637-07-0
671-16-9	727-81-1	754-91-6	768-94-5, Tricyclo[3.3.1.13,7]decan-1-			
amine	804-36-4	865-21-4, Vincaleukoblastine	914-00-1	956-48-9		
960-71-4	1041-01-6	1066-17-7, Colistin	1151-51-5	1392-21-8,		
Leucomycin	1397-89-3, Amphotericin B	1400-61-9, Nystatin	1402-38-6,			
Actinomycin	1402-82-0, Amphomycin	1403-17-4, Candicidin	1403-66-3,			
Gentamicin	1404-04-2, Neomycin	1404-88-2, Tyrothricin	1405-87-4,			

Bacitracin 1405-97-6, Gramicidin 1406-05-9, Penicillin 1406-11-7,
 Polymyxin 1689-83-4 1960-88-9 2001-95-8, Valinomycin 2022-85-7
 2030-63-9 2034-22-2 2338-10-5 2338-11-6 2338-12-7 2338-29-6
 2520-21-0 3056-17-5 3511-16-8 3778-73-2 4151-50-2
 4342-03-4 4428-95-9 4543-33-3 5331-91-9 5536-17-4 6217-54-5
 6236-05-1 6893-02-3 7283-41-2 7440-43-9, Cadmium, biological studies
 7440-70-2, Calcium, biological studies 7481-89-2 7562-61-0
 8011-61-8, Tyrocidine 8052-16-2, Actinomycin C 9007-92-5, Glucagon,
 biological studies 10118-90-8 10417-94-4 10461-11-7 10537-47-0
 11000-17-2, Vasopressin 11003-38-6, Capreomycin 11006-76-1,
 Virginiamycin 11006-78-3, Stendomycin 11017-50-8, Suzukacillin
 11029-61-1, Gramicidin A 11056-06-7, Bleomycin 11111-23-2, Lividomycin
 11115-82-5, Enduracidin 12633-72-6, Amphotericin 12692-85-2,
 Antiamoebin 13010-47-4 13278-36-9 13311-84-7 13392-28-4
 13799-49-0 13799-49-0D, isomers 13909-09-6 13925-12-7 14459-29-1
 14698-29-4 15663-27-1 16128-96-4 17090-79-8, Monensin 17650-86-1
 17924-92-4 18323-44-9 19246-70-9 19562-30-2 19721-56-3
 20559-55-1 22494-42-4 22662-39-1 22916-47-8 25104-18-1
 25546-65-0 26097-80-3 26655-39-0 26786-84-5 26787-78-0
 27061-78-5, Alamethicin 27138-57-4D, lactone, derivs. 27194-24-7D,
 derivs. 27314-97-2 27693-70-5 28380-24-7, Nigericin 29767-20-2
 30042-37-6 30516-87-1 31441-78-8, Purinethiol 32986-56-4
 33069-62-4 33354-58-4 33419-42-0 34368-04-2 36791-04-5
 36877-68-6D, derivs. 37231-28-0, Melittin 37517-28-5 38000-06-5
 38640-92-5 40451-44-3 41575-94-4 45285-51-6 50892-23-4
 51940-44-4 52214-84-3 53024-98-9, Everninomicin 53714-56-0
 54965-21-8 55486-00-5 56219-57-9 59277-89-3 60842-45-7, Desaspidin
 60976-67-2, Gramicidin J 61477-96-1 62362-59-8 63939-09-3, Curamycin
 65277-42-1 65454-19-5, Trichotoxin
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(chem. induced intracellular hyperthermia for diagnostic and
 therapeutic use, and use with other agents)

IT 68786-66-3 69655-05-6 72301-79-2 74011-58-8 74722-67-1
 80738-43-8D, Lincosamide, derivs. 80802-79-5, Cecropin (antibacterial
 peptide) 81627-83-0, Colony-stimulating factor 1 82410-32-0
 82419-36-1 83150-76-9 83869-56-1, Colony-stimulating factor 2
 84625-61-6 85721-33-1 86386-73-4 89107-47-1, Hypelcin 91156-71-7
 95233-18-4 100292-37-3, Zervamicin 113041-69-3, Magainin 115717-83-4
 121007-17-8 127779-20-8 128470-16-6 134678-17-4 136470-78-5
 145781-92-6 148159-85-7, Saturnisporin SA IV 150378-17-9 154598-52-4
 155213-67-5 159989-64-7 161814-49-9 171980-70-4, Trichorzin HA V
 256932-84-0 256932-84-0D, sulfoxide and sulfone metabolites
 256932-85-1 256932-86-2 256932-87-3 256932-88-4 256932-89-5
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(chem. induced intracellular hyperthermia for diagnostic and
 therapeutic use, and use with other agents)

IT 9001-92-7, Proteinase 9039-48-9, Aromatase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; chem. induced intracellular hyperthermia for diagnostic
 and therapeutic use, and use with other agents)

IT 29656-58-4D, derivs.
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(lichen acids; chem. induced intracellular hyperthermia for diagnostic
 and therapeutic use, and use with other agents)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Gordon; US 4569836 A 1986 HCAPLUS

(2) Gordon; US 5622686 A 1997

(3) Rubin; US 5005588 A 1991

IT 3056-17-5 30516-87-1 33069-62-4

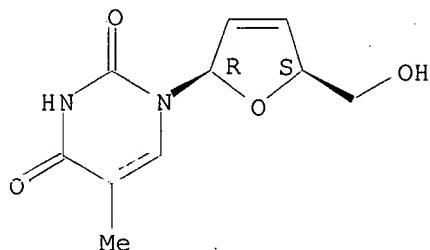
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

RN 3056-17-5 HCPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

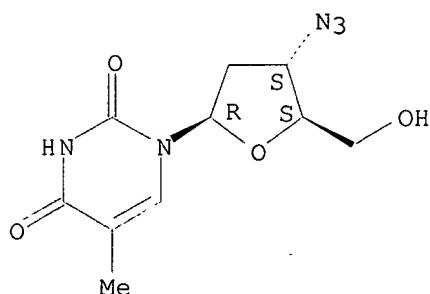
Absolute stereochemistry.



RN 30516-87-1 HCPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

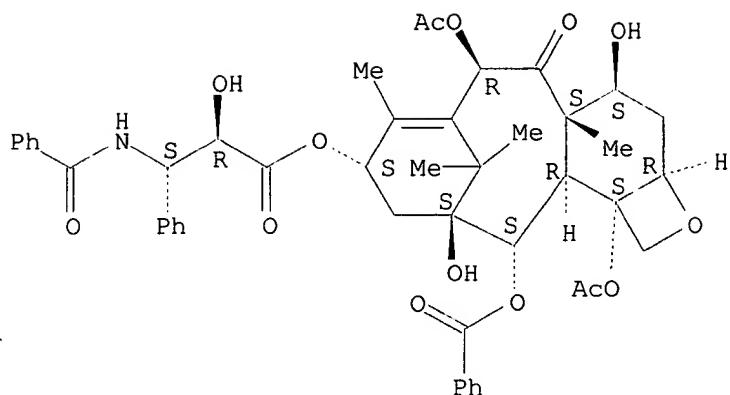
Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetoxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:659252 HCAPLUS

DN 131:291291

TI New **combined** preparation for the treatment of **neoplastic** or infectious diseases

IN Bartholeyns, Jacques; Fouron, Yves; Romet-Lemonne, Jean-loup

PA I.D.M. Immuno-Designed Molecules, Fr.

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K035-14

ICS C12N005-08; A61K035-14; A61K031-00; A61K035-14; A61K038-19; A61K035-14; A61K039-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 15

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9951248	A1	19991014	WO 1999-EP2105	19990329 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2321029	AA	19991014	CA 1999-2321029	19990329 <--
	AU 9931479	A1	19991025	AU 1999-31479	19990329 <--
	EP 1067944	A1	20010117	EP 1999-913310	19990329 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002510639	T2	20020409	JP 2000-542019	19990329 <--
PRAI	EP 1998-400783	A	19980402		<--
	WO 1999-EP2105	W	19990329		<--

AB The present invention relates to a **combined** prepn. contg. as active substance the following individual components, in the form of a kit-of-parts: monocyte derived cells, particularly cytotoxic macrophages, **chemotherapy** or immunotherapy drugs, for the **simultaneous**, sep. or sequential use, for the treatment of **cancer** or infectious diseases.

ST kit **antitumor** immunocyte immunostimulant
IT Immunostimulants

(adjuvants; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Glycosides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(amino; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Blood transfusion
(apheresis; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Blood serum
(autologous; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Medical goods
(blood bags, collection with; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Monocyte
(cells derived from; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Blood
(centrifugation of; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Leukocyte
(collection of peripheral; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Lymphocyte
Mononuclear cell (leukocyte)
(collection of; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Intestine, neoplasm
(colorectal; **combined** prepn. for the treatment of
neoplastic or infectious diseases)

IT Antibiotics
Antitumor agents
Antiviral agents
Culture media
Cytotoxic agents
Immunostimulants
Immunotherapy
Melanoma
Mycobacterium BCG
Ovary, neoplasm
Test kits
Vaccines
(**combined** prepn. for the treatment of **neoplastic** or
infectious diseases)

IT Cytokines
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process);
BIOL (Biological study); PROC (Process)
(**combined** prepn. for the treatment of **neoplastic** or
infectious diseases)

IT Anthracyclines
Cyclins
Interleukin 12
Interleukin 2
Macrolides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**combined** prepn. for the treatment of **neoplastic** or
infectious diseases)

- IT Preservatives
 - (cryo-; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Macrophage
 - (cytotoxic; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Apoptosis
 - (inducers; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Drug delivery systems
 - (injections; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Lung, neoplasm
 - (mesothelioma; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Glycopeptides
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(muramic acid-contg.; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Leukemia
 - (myelogenous; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Prostate gland
 - (neoplasm; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Centrifugation
 - (of blood; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Amines, biological studies
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
(polyamines, nonpolymeric, inhibitors; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Proliferation inhibition
 - (proliferation inhibitors; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Erythrocyte
 - Platelet (blood)
 - Polymorphonuclear leukocyte
 - (removal of; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Vaccines
 - Vaccines
 - (tumor; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Antitumor agents
 - Antitumor agents
 - (vaccines; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Alkaloids, biological studies
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(vinca; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Lactams
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(.beta.-; **combined** prepn. for the treatment of neoplastic or infectious diseases)
- IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (.gamma.; **combined** prepn. for the treatment of neoplastic or infectious diseases)

IT 124-38-9, Carbon dioxide, biological studies 7782-44-7, Oxygen, biological studies

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (artificial atm. contg.; **combined** prepn. for the treatment of neoplastic or infectious diseases)

IT 50-07-7, Mitomycin C 50-18-0, Cyclophosphamide 51-21-8D, Fluorouracil, derivs. 57-22-7, Vincristine 71-58-9, Prodasone 154-93-8, Carmustine 156-54-7, Sodium butyrate 446-86-6, Azathioprine 1406-05-9, Penicillin 4428-95-9, Foscarnet 7803-58-9, Sulfamide 10540-29-1, Tamoxifen 11111-12-9, Cephalosporins 15663-27-1, Cisplatin 20830-81-3, Daunorubicin 25316-40-9, Adriamycin 30516-87-1, Azt 33069-62-4, Taxol 37205-61-1, Proteinase inhibitor 59277-89-3, Acyclovir 63798-73-2, Cyclosporine 79517-01-4, Sandostatin 83869-56-1, Gmcsf 114977-28-5D, Taxotere, derivs. 143011-72-7, Gcsf

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (**combined** prepn. for the treatment of neoplastic or infectious diseases)

IT 80449-01-0, Topoisomerase

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; **combined** prepn. for the treatment of neoplastic or infectious diseases)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bartoleyns, J; IMMUNOBIOLOGY 1996, V195(4-5), P550 MEDLINE
- (2) Hennemann, B; CLINICAL IMMUNOTHERAPEUTICS 1996, V5/4, P294
- (3) Hennemann, B; JOURNAL OF IMMUNOTHERAPY 1997, V20(5), P365 HCPLUS
- (4) I D M Immuno-Designed Molecules; WO 9622781 A 1996 HCPLUS

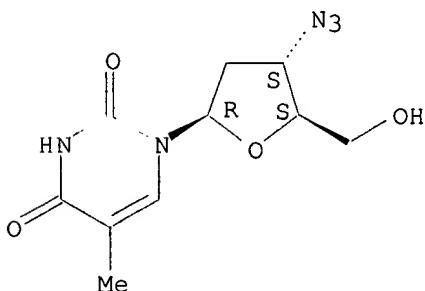
IT 30516-87-1, Azt 33069-62-4, Taxol

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (**combined** prepn. for the treatment of neoplastic or infectious diseases)

RN 30516-87-1 HCPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

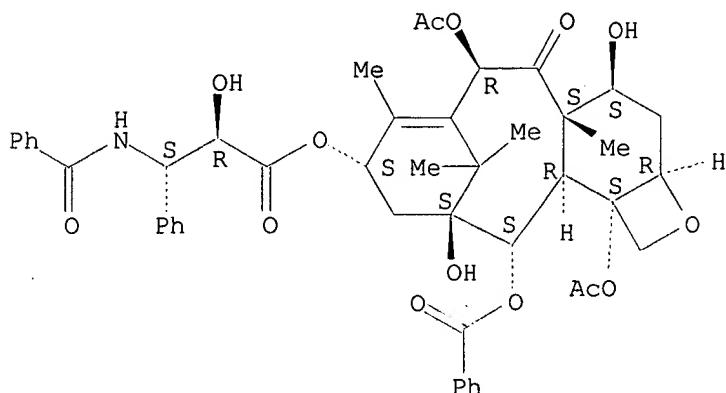


RN 33069-62-4 HCPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-

tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:606769 HCAPLUS

DN 131:341861

TI Pluronic P85 increases permeability of a broad spectrum of drugs in polarized BBMEC and Caco-2 cell monolayers

AU Batrakova, Elena V.; Li, Shu; Miller, Donald W.; Kabanov, Alexander V.

CS Department of Pharmaceutical Sciences, Nebraska Medical Center, College of Pharmacy, Omaha, NE, 68198-6025, USA

SO Pharmaceutical Research (1999), 16(9), 1366-1372

CODEN: PHREEB; ISSN: 0724-8741

PB Kluwer Academic/Plenum Publishers

DT Journal

LA English

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1

AB Previous studies demonstrated that inhibition of P glycoprotein (P-gp) by Pluronic P85 (P85) block copolymer increases apical (AP) to basolateral (BL) transport of rhodamine 123 (R123) in the polarized monolayers of bovine brain microvessel endothelial cells (BBMEC) and Caco-2 cells. The present work examines the effects of P85 on the transport of fluorescein (Flu), doxorubicin (Dox), etoposide (Et), taxol (Tax), 3'-azido-3'-deoxythymidine (AZT), valproic acid (VPA) and loperamide (Lo) using BBMEC and Caco-2 monolayers as in vitro models of the blood brain barrier and intestinal epithelium resp. Drug permeability studies were performed on the confluent BBMEC and Caco-2 cell monolayers mounted in Side-Bi-Side diffusion cells. Exposure of the cells to P85 significantly enhanced AP to BL permeability coeffs. of Flu, Tax, Dox and AZT in both cell models. Further, P85 enhanced AP to BL transport of Et, VPA and Lo in Caco-2 monolayers. No changes in the permeability coeffs. of the paracellular marker mannitol were obsd. in the presence of the copolymer. P85 increases AP to BL permeability in BBMEC and Caco-2 monolayers with respect to a broad panel of structurally diverse compds., that were previously shown to be affected by P-gp and/or multidrug resistance assocd. protein (MRP) efflux systems. Broad specificity of the block copolymer effects with respect to drugs and efflux systems appears to be a valuable property in view of developing pharmaceutical formulations to increase drug accumulation in selected organs and overcome both acquired and intrinsic drug resistance that limits the effectiveness of many chemotherapeutic agents.

ST drug permeability Pluronic P35; antitumor drug permeability

Pluronic P35
 IT Animal cell line
 (Caco-2; Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
 IT Antitumor agents
 Biological transport
 Drug delivery systems
 Multidrug resistance
 (Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
 IT P-glycoproteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
 IT Brain
 (microvessel endothelial cells; Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
 IT Biological transport
 (permeation; Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
 IT 99-66-1, Valproic acid 2321-07-5, Fluorescein 23214-92-8, Doxorubicin 30516-87-1, Azt 33069-62-4, Taxol 33419-42-0, Etoposide 53179-11-6, Loperamide 106392-12-5, Pluronic P85
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Adkinson, K; Epilepsy Res 1996, V23, P95
- (2) Batrakova, E; Br J Cancer 1996, V74, P1545 HCPLUS
- (3) Batrakova, E; Pharm Res 1998, V15, P1525 HCPLUS
- (4) Batrakova, E; Pharm Res 1998, V15, P852
- (5) Berger, W; Int J Cancer 1997, V73, P84 HCPLUS
- (6) Cordon-Cardo, C; Proc Natl Acad Sci USA 1989, V86, P695 HCPLUS
- (7) Essodaigui, M; Biochemistry 1998, V37, P2243 HCPLUS
- (8) Fogh, J; J Natl Cancer Inst 1977, V59, P221 MEDLINE
- (9) Fontaine, M; Life Sci 1996, V59, P1521 HCPLUS
- (10) Hosoya, K; Pharm Res 1996, V13, P885 HCPLUS
- (11) Huai, Y; Biochem Biophys Res Commun 1998, V243, P816
- (12) Karlsson, J; Biochim Biophys Acta 1992, V1111, P204 HCPLUS
- (13) Krishan, A; Cytometry 1997, V29, P279 HCPLUS
- (14) Ling, V; Cancer Chemother Pharmacol 1997, V40(Suppl), PS3
- (15) Lum, B; Drug Resist Clin Oncol Hematol 1995, V9, P319 MEDLINE
- (16) Makhey, V; Pharm Res 1998, V15, P1160 HCPLUS
- (17) Miller, D; Bioconjug Chem 1997, V8, P649 HCPLUS
- (18) Miller, D; J Tiss Cult Meth 1992, V14, P217
- (19) Miller, D; Pharm Res 1999, V16, P396 HCPLUS
- (20) Nerurkar, M; J Pharm Sci 1997, V7, P813
- (21) Pauletti, G; Pharm Res 1996, V13, P1615 HCPLUS
- (22) Peters, W; Gastroenterol 1992, V103, P448 MEDLINE
- (23) Schinkel, A; J Clin Invest 1996, V97, P2517 HCPLUS
- (24) Takasawa, K; J Pharmacol Exp Ther 1997, V281, P369 HCPLUS
- (25) Van Ark Otte, J; Oncol Rep 1998, V5, P249 HCPLUS
- (26) Van Veen, H; Semin Cancer Biol 1997, V8, P183 HCPLUS
- (27) Venne, A; Cancer Res 1996, V56, P3626 HCPLUS
- (28) Wang, Y; J Pharm Sci 1997, V86, P1484 HCPLUS

(29) Wu, D; Brain Res 1998, V791, P313 HCAPLUS

(30) Yu, V; Bioconjugate Chem 1996, V7, P209

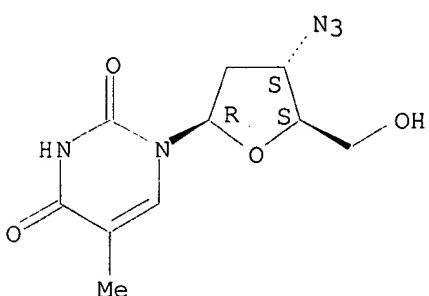
IT 30516-87-1, Azt 33069-62-4, Taxol

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)

RN 30516-87-1 HCAPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

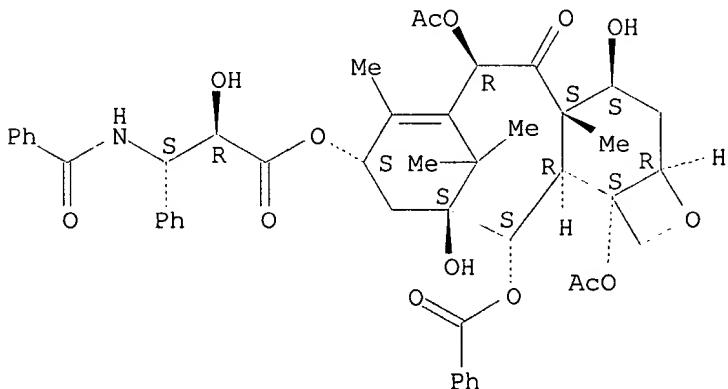
Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:578949 HCAPLUS

DN 131:209112

TI A method for evaluating the antitumor effect of a drug or a treatment

IN Ishikawa, Atsuo; Yanaginuma, Yuji; Tsuruoka, Hiroki; Ito, Akira

PA Kayaku K. K., Japan; Pola Chemical Industries, Inc.

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C12Q001-527

CC 1-1 (Pharmacology)

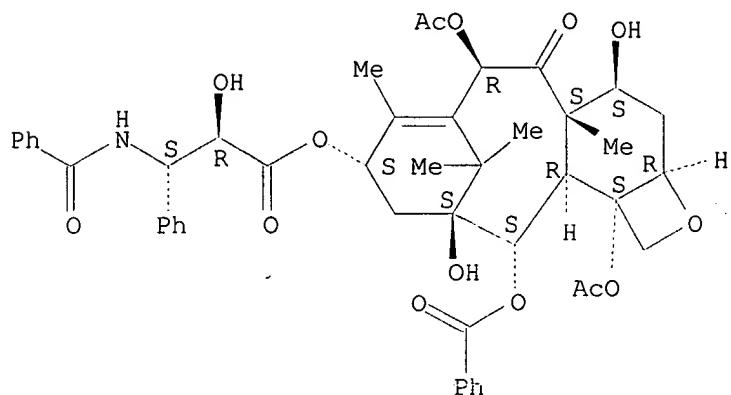
Section cross-reference(s): 7

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11243994	A2	19990914	JP 1998-52077	19980304 <--
AB	A method is described for evaluating the antitumor effect of a drug or a treatment by measuring a change in telomere -related substance activity in cancer cells caused by the drug or treatment. By this method, the antitumor effect of a drug or a treatment, and the characteristics of cancer cells against the drug or treatment, can be evaluated. The method is also useful for predicting the effect of an antitumor agent in cancer chemotherapy. Correlations were obsd. between the growth inhibitory effect on cell lines derived from various types of cancer and the change in telomerase activity in these cells caused by the antitumor agent (e.g., cisplatin, taxol).				
ST	antitumor agent cancer chemotherapy telomerase telomere				
IT	Animal cell line (SiHa; HeLa; SKOV3; method for evaluating antitumor effect of drug or treatment)				
IT	Uterus, neoplasm Uterus, neoplasm (cervix, inhibitors; method for evaluating antitumor effect of drug or treatment)				
IT	Antitumor agents (cervix; method for evaluating antitumor effect of drug or treatment)				
IT	Ovary, neoplasm Ovary, neoplasm (inhibitors; method for evaluating antitumor effect of drug or treatment)				
IT	Antitumor agents Chemotherapy Telomeres (chromosome) (method for evaluating antitumor effect of drug or treatment)				
IT	Antitumor agents Antitumor agents (ovary; method for evaluating antitumor effect of drug or treatment)				
IT	120178-12-3, Nucleotidyltransferase, terminal deoxyribo-(telomeric DNA) RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (method for evaluating antitumor effect of drug or treatment)				
IT	15663-27-1, Cisplatin 33069-62-4, Taxol RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (method for evaluating antitumor effect of drug or treatment)				
IT	120178-12-3, Nucleotidyltransferase, terminal deoxyribo-(telomeric DNA) RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (method for evaluating antitumor effect of drug or treatment)				
RN	120178-12-3 HCAPLUS				
CN	Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)				
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***					
IT	33069-62-4, Taxol RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (method for evaluating antitumor effect of drug or treatment)				
RN	33069-62-4 HCAPLUS				
CN	Benzene propanoic acid, .beta.- (benzoyl amino) -.alpha.- hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-				

2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:312077 HCAPLUS

DN 130:346876

TI Potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**

AU Schwartz, J. D.; Howard, W.; Scadden, D. T.

CS New York Hosp./Cornell Med. Center Hematology/Oncology, New York, NY, 10021, USA

SO AIDS (London) (1999), 13(2), 283-284
CODEN: AIDSET; ISSN: 0269-9370

RC607.A 24 A344

PB Lippincott Williams & Wilkins

DT Journal

LA English

CC 1-4 (Pharmacology)

AB The interactions between cytochrome P 450 3A(CYP3A)-suppressive anti-HIV regimens and **paclitaxel** resulted in substantial **chemotherapy**-related side effects in patients with AIDS-related Kaposi's **sarcoma**. **Paclitaxel** (100 mg/m²) administration over 3 h every other week to patients with HIV infection and Kaposis **sarcoma** resulted in near-total disappearance of Kaposi's **sarcoma**. The first 12 cycles were complicated only by mild nausea and alopecia; intermittent granulocyte colony-stimulating factor was used to prevent neutropenia. Antiretroviral therapy included several combinations of **zidovudine**, **zalcitabine**, **lamivudine**, **stavudine**, and **indinavir**, all of which were unsuccessful in reducing the viral load. Subsequently the patients were started on **didanosine**, **saquinavir** and **delavirdine**. As a result of this therapy, **paclitaxel** resulted in profound mucositis requiring hospitalization and febrile neutropenia with an abs. neutrophil count <100 x10⁶/l. Given the above scenario, it is likely, that coadministration of **delavirdine** and **saquinavir** results in a situation where levels of either (or both) drugs are increased and **concomitant** administration of taxane **chemotherapy** with **paclitaxel** leads to side-effects significantly out of proportion to the taxane dose used. Thus, taxane doses in these situations should be reduced and patients carefully monitored.

ST taxane **chemotherapy** adverse interaction antiretroviral therapy AIDS **sarcoma**; **paclitaxel** interaction adverse antiretroviral therapy AIDS **sarcoma**

IT Drug interactions

(adverse; potential interaction of antiretroviral therapy with paclitaxel in patients with AIDS-related Kaposi's sarcoma)

IT AIDS (disease)

Antiviral agents

(potential interaction of antiretroviral therapy with paclitaxel in patients with AIDS-related Kaposi's sarcoma)

IT Taxanes

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential interaction of antiretroviral therapy with paclitaxel in patients with AIDS-related Kaposi's sarcoma)

IT Antitumor agents

(sarcoma; potential interaction of antiretroviral therapy with paclitaxel in patients with AIDS-related Kaposi's sarcoma)

IT 9035-51-2, Cytochrome P450, biological studies

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(3A antiretroviral therapy interaction with paclitaxel in patients with AIDS-related Kaposi's sarcoma)

IT 3056-17-5, Stavudine 7481-89-2, Zalcitabine

8064-90-2 30516-87-1, Zidovudine 33069-62-4,
Paclitaxel 69655-05-6, Didanosine 86386-73-4, Fluconazole
127779-20-8, Saquinavir 134678-17-4, Lamivudine 136817-59-9,
Delavirdine 150378-17-9, Indinavir 159989-64-7, Nelfinavir
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential interaction of antiretroviral therapy with paclitaxel in patients with AIDS-related Kaposi's sarcoma)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; Ann Intern Med 1998, V128, P1079
- (2) Carpenter, C; Ann Intern Med 1998, V128, P1057
- (3) Carpenter, C; JAMA 1998, V280, P78 HCPLUS
- (4) Cresteil, T; Cancer Res 1994, V54, P386 HCPLUS
- (5) Freimuth, W; Adv Exp Med Biol 1996, V394, P279 HCPLUS
- (6) Gill, P; J Acquir Immune Defic Syndr 1997, V14(suppl), PA35
- (7) Harris, J; Cancer Res 1994, V15, P4026
- (8) Piscitelli, S; Clin Infect Dis 1996, V23, P685 HCPLUS
- (9) von Moltke, L; J Clin Pharmacol 1998, V38, P106 HCPLUS

IT 3056-17-5, Stavudine 30516-87-1,

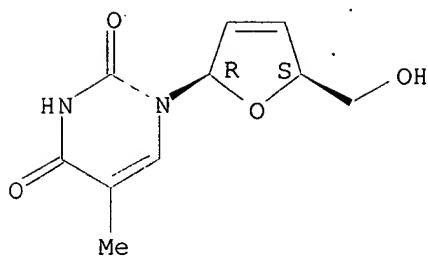
Zidovudine 33069-62-4, Paclitaxel

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential interaction of antiretroviral therapy with paclitaxel in patients with AIDS-related Kaposi's sarcoma)

RN 3056-17-5 HCPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

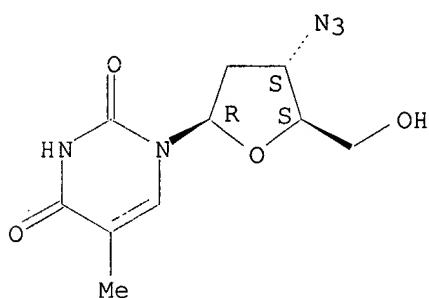
Absolute stereochemistry.



RN 30516-87-1 HCAPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

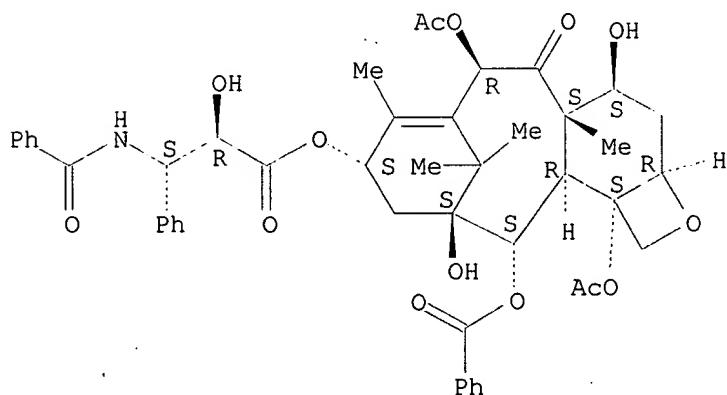
Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
(2aR,4S,4aS,6R,9S,11S,12aS,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-
2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-
tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl
ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:42002 HCAPLUS

DN 130:276313

TI Cell-killing by paclitaxel in a metastatic murine melanoma cell line is mediated by extensive telomere erosion with no decrease in telomerase activity

AU Multani, Asha S.; Li, Chun; Ozen, Mustafa; Imam, Ashraf S.; Wallace,

CS Sidney; Pathak, Sen
 SO Department of Cancer Biology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 77030, USA
 Oncology Reports (1999), 6(1), 39-44
 CODEN: OCRPEW; ISSN: 1021-335X
 PB Oncology Reports
 DT Journal
 LA English
 CC 1-6 (Pharmacology)
 AB The purpose of this study was to investigate and compare the effects of paclitaxel and its water-sol. conjugates (sodium-pentetic acid-paclitaxel; polyethylene glycol-paclitaxel, and poly[L-glutamic acid]-paclitaxel) on chromosome morphol. and induction of apoptosis in a metastatic murine melanoma cell line (K1735 clone X-21). For this, murine melanoma cells were treated continuously for 72 h with three concns. (1.2 .mu.M, 2.4 .mu.M, and 4.8 .mu.M) of each of paclitaxel, and conjugates. Another set of cells were pulse-treated at 2.4 .mu.M, 4.8 .mu.M and 9.6 .mu.M concns. of each of these drugs for 4 h and the recovered cells were exmd. after 72 h. Control cultures received only the solvents (DMSO or water). Our results showed a significant increase in the frequencies of telomeric assocns., chromosome aberrations, polyploidization, distorted and disintegrated chromosome morphol., and reduced telomeric signal intensity by fluorescence in situ hybridization, in treated cultures as compared to the controls. However, we detected no change in telomerase activity. In addn., the majority of interphase nuclei in treated cells showed apoptotic bodies, with chromatin condensation. These in vitro results suggest that cell death induced by paclitaxel and its water-sol. conjugates is due to the loss of telomeric repeats, as shown by reduced signal fluorescence and increased telomeric assocns.
 ST melanoma metastasis paclitaxel telomere telomerase
 IT Chromatin
 Chromosome aberrations
 Telomeres (chromosome)
 (cell-killing by paclitaxel in a metastatic murine melanoma cell line is mediated by extensive telomere erosion with no decrease in telomerase activity)
 IT Antitumor agents
 Antitumor agents
 Antitumor agents
 (melanoma, metastasis; cell-killing by paclitaxel in a metastatic murine melanoma cell line is mediated by extensive telomere erosion with no decrease in telomerase activity)
 IT 33069-62-4, Paclitaxel 33069-62-4D,
 Paclitaxel, conjugates
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cell-killing by paclitaxel in a metastatic murine melanoma cell line is mediated by extensive telomere erosion with no decrease in telomerase activity)
 IT 120178-12-3, Telomerase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (cell-killing by paclitaxel in a metastatic murine melanoma cell line is mediated by extensive telomere erosion with no decrease in telomerase activity)
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Amoss, M; Advances in Swine in Biomedical Research 1996, P319

- (2) Bhalla, K; Leukemia 1993, V7, P563 MEDLINE
 (3) Crossin, K; Cell 1981, V27, P341 HCAPLUS
 (4) Danesi, R; Mol Pharmacol 1995, V47, P1106 HCAPLUS
 (5) Fidler, I; Cancer Res 1986, V46, P5167 MEDLINE
 (6) Jordan, M; Cancer Res 1996, V56, P816 HCAPLUS
 (7) Kim, N; Science 1994, V266, P2011 HCAPLUS
 (8) Li, C; Anticancer Drugs 1996, V7, P642 HCAPLUS
 (9) Li, C; Cancer Res 1998, V58, P2404 HCAPLUS
 (10) Martin, S; Cell Tissue Kinet 1990, V23, P545 MEDLINE
 (11) McClintock, B; Genetics 1941, V26, P234
 (12) Milas, L; Cancer Chemother Pharmacol 1995, V35, P297 HCAPLUS
 (13) Muller, H; Woods Hole 1938, V8, P183
 (14) Multani, A; Anticancer Res 1997, V17, P4269 HCAPLUS
 (15) Ozen, M; Prostate 1998, V36, P264 HCAPLUS
 (16) Pathak, S; Archivos de Zootechnia 1996, V45, P141 HCAPLUS
 (17) Pathak, S; Cancer Genet Cytogenet 1991, V56, P209 MEDLINE
 (18) Pathak, S; In Vivo 1994, V8, P843 MEDLINE
 (19) Pathak, S; Int J Oncol 1994, V4, P323
 (20) Pathak, S; Oncol Rep 1998, V5, P373 HCAPLUS
 (21) Schiff, P; Nature 1979, V22, P665
 (22) Sollott, S; J Clin Invest 1995, V95, P1869 HCAPLUS
 (23) Wani, M; J Am Chem Soc 1971, V93, P2325 HCAPLUS
 (24) Wiernik, P; J Clin Oncol 1987, V5, P1232 MEDLINE

IT 33069-62-4, Paclitaxel 33069-62-4D,

Paclitaxel, conjugates

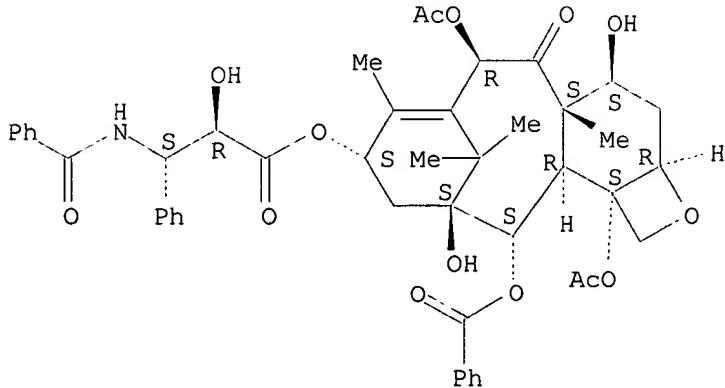
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cell-killing by paclitaxel in a metastatic murine melanoma cell line is mediated by extensive telomere erosion with no decrease in telomerase activity)

RN 33069-62-4 HCAPLUS

CN Benzene propanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

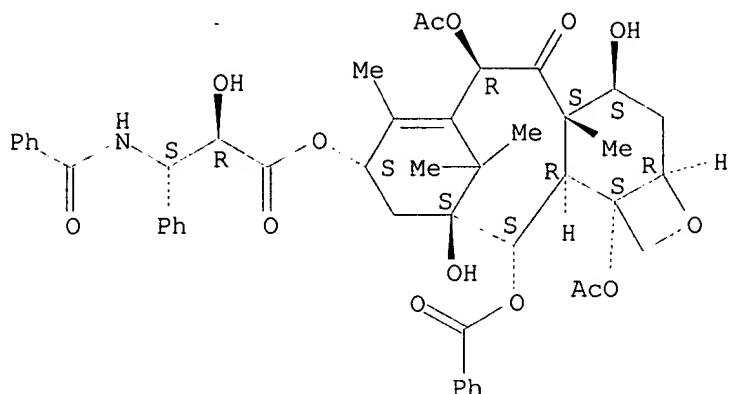
Absolute stereochemistry. Rotation (-).



RN 33069-62-4 HCAPLUS

CN Benzene propanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 120178-12-3, Telomerase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cell-killing by paclitaxel in a metastatic murine melanoma cell line is mediated by extensive telomere erosion with no decrease in telomerase activity)

RN 120178-12-3 HCPLUS

CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L65 ANSWER 14 OF 18 HCPLUS COPYRIGHT 2002 ACS

AN 1998:764282 HCPLUS

DN 130:20546

TI HIV and cancer treatment

IN Camden, James Berger

PA The Procter & Gamble Company, USA

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-41

ICS A61K031-415; A61K031-66

CC 1-5 (Pharmacology)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9851303	A1	19981119	WO 1997-US21564	19971126 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	ZA 9709095	A	19980511	ZA 1997-9095	19971010 <--
	AU 9874029	A1	19981208	AU 1998-74029	19971126 <--
	EP 954309	A1	19991110	EP 1997-949599	19971126 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	BR 9712981	A	20000418	BR 1997-12981	19971126 <--
	CN 1254281	A	20000524	CN 1997-182189	19971126 <--
	JP 2000510156	T2	20000808	JP 1998-522997	19971126 <--
	NO 9901701	A	20000117	NO 1999-1701	19990409 <--

KR 2000049064 A 20000725 KR 1999-703137 19990410 <--
PRAI US 1997-46726P P 19970516 <--
WO 1997-US21564 W 19971126 <--

AB A method of treating HIV or other viral infections by administering a herbicide or fungicide or deriv. thereof to an animal or human. The fungicides or herbicides can be used in conjunction with other treatments, e.g. with AZT or protease inhibitors for the treatment of HIV. For example, thiabendazole and chloropropham have been shown to quickly reduce the level of virus prodn. from cell populations chronically infected with HIV-1 and the antiviral effect is maintained with continued compd. exposure. This redn. of virus prodn. occurs at concns. which are non toxic to the host cell and which have no effect on the syntheses of cellular DNA, RNA and protein. Further, chronically infected cells treated for prolonged periods of time with thiabendazole and chloropropham were not super-infected with HIV. A method for inhibiting the growth of tumors and cancers in mammals comprising administering a herbicidal or fungicidal deriv. is also disclosed herein. The fungicides or herbicides can be used in conjunction with other treatments, e.g. taxol for the treatment of breast cancer. Potentiators can also be included in the herbicidal or fungicidal compn. This method is particularly effective when the cancer or virus is an animal cell genetically modified by plant or fungus genetic material. A chemotherapeutic agent can also be administered first to significantly reduce the size of the cancer and then the treatment with the herbicide or fungicide is used. These methods are particularly effective when the cancer or virus is a mutated cell comprising plant or fungal genetic material.

ST herbicide fungicide antitumor antiviral HIV

IT Intestine, neoplasm

(colon, inhibitors; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Antitumor agents

(colon; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Lung, neoplasm

(inhibitors; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Antitumor agents

(leukemia; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Drug delivery systems

(liposomes; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Antitumor agents

(lung; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Antitumor agents

(mammary gland; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Antitumor agents

(melanoma; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Mammary gland

(neoplasm, inhibitors; therapy of cancer and viral infections with drugs in combination with fungicides and herbicides)

IT Antitumor agents

Antiviral agents

Fungicides

Herbicides

Human immunodeficiency virus 1

(therapy of cancer and viral infections with drugs in

combination with fungicides and herbicides)

IT 144114-21-6, Retropepsin
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; therapy of **cancer** and viral infections with
 drugs in **combination** with fungicides and herbicides)

IT 50-18-0, Cyclophosphamide 50-44-2, 6-Mercaptopurine 50-76-0,
 Dactinomycin 50-91-9 51-17-2, Benzimidazole 51-21-8, Fluorouracil
 59-05-2, Methotrexate 101-21-3, Chloropropham 126-07-8, Griseofulvin
 127-07-1, Hydroxyurea 147-94-4, Cytarabine 148-79-8 154-42-7,
 6-Thioguanine 320-67-2, Azacytidine 645-05-6, Altretamine 768-94-5,
 Amantadine 1071-83-6 9015-68-3, Asparaginase 10605-21-7
 11056-06-7, Bleomycin 15663-27-1, Cisplatin 17804-35-2, Benomyl
 18378-89-7, Plicamycin 21679-14-1, Fludarabine 23214-92-8, Doxorubicin
 25316-40-9, Adriamycin 29767-20-2, Teniposide 30516-87-1,
 3'-Azido-3'-deoxythymidine 33069-62-4, **Taxol**
 33419-42-0, Etoposide 34435-09-1, A-36683 53910-25-1, Pentostatin
 60207-90-1, Propiconazole 76849-19-9, CB3717 86386-73-4, Fluconazole
 125317-39-7, Navelbine 216252-30-1, Cycrabine
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)
 (therapy of **cancer** and viral infections with drugs in
 combination with fungicides and herbicides)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Merck & Co; EP 0617968 A 1994 HCPLUS
- (2) Procter & Gamble; WO 9632103 A 1996 HCPLUS
- (3) Procter & Gamble; WO 9632104 A 1996 HCPLUS
- (4) Procter & Gamble; WO 9632115 A 1996 HCPLUS
- (5) Procter & Gamble; WO 9705873 A 1997 HCPLUS

IT 30516-87-1, 3'-Azido-3'-deoxythymidine 33069-62-4,
Taxol

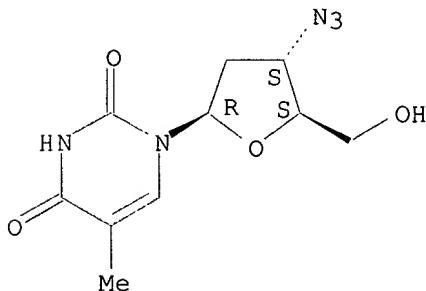
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(therapy of **cancer** and viral infections with drugs in
 combination with fungicides and herbicides)

RN 30516-87-1 HCPLUS

CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

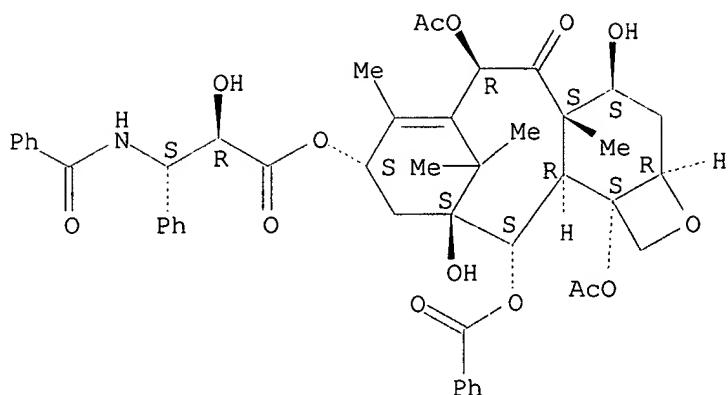
Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
 (2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS)-6, 12b-bis(acetoxy)-12-(benzoyloxy)-
 2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-4a, 8, 13, 13-
 tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-9-yl
 ester, (.alpha.R, .beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2002 ACS
 AN 1998:729760 HCAPLUS
 DN 130:137432
 TI Molecular and biological features of two new human squamous and adenocarcinoma of the lung cell lines
 AU Gasperi-Campani, Anna; Roncuzzi, Laura; Ricotti, Luca; Lenzi, Laura; Gruppioni, Rita; Sensi, Alberto; Zini, Nicoletta; Zoli, Wainer; Amadori, Dino
 CS Department of Experimental Pathology, University of Bologna, Bologna, 40126, Italy
 SO Cancer Genetics and Cytogenetics (1998), 107(1), 11-20
 CODEN: CGCYDF; ISSN: 0165-4608
 PB Elsevier Science Inc.
 DT Journal
 LA English
 CC 14-1 (Mammalian Pathological Biochemistry)
 Section cross-reference(s): 1, 3
 AB Two human cancer cell lines were established from metastatic lesions of an adenocarcinoma (RAL) and a squamous cell (CAEP) carcinoma of the lung. The clin. histories of the patients from whom the cell lines were derived are reported. The lines were maintained in continuous culture with doubling times of 65 (RAL) and 50 (CAEP) hours. The RAL and CAEP cell lines, whose morphol. and ultrastructural features are presented, showed extensively rearranged karyotypes with modal no. of 85 (RAL) and 98 (CAEP). In particular, chromosome 2 pentasomy and several clonal markers were evident in the RAL cells, whereas a *telomeric* deletion of chromosome 1, del(1)(q32), was obsd. in the CAEP cells. The morphol. data were confirmed by high expression of specific antigens for each histotype. A marked positivity of the neuron-specific enolase (NSE) levels was evident by immunoenzymic assays in the cell lines cytosol with respect to those present in the resp. patient's sera. No amplification or rearrangements were evident in the CMYC, LMYC, NMYC, INT-2, ERBB2, HRAS, KRAS, MOS, HST-1 genes by Southern blotting anal. in each cell line. Point mutations in exon 1 of KRAS and in exon 7 of TP53 were evident by polymerase chain reaction (PCR)-DNA sequencing in the RAL cell line, whereas no alterations were present in the HRAS and RB genes. The four genes studied did not show point mutations in the CAEP cell line. The RAL cell line was resistant to all the drugs tested, whereas the CAEP cells were sensitive to vinblastine. These cell lines may represent useful exptl. models to investigate lung cancer biol. and anticancer drug response.
 ST chromosome aberration lung squamous cell carcinoma adenocarcinoma line; tumor antigen lung squamous cell carcinoma adenocarcinoma line; drug resistance lung squamous cell carcinoma adenocarcinoma line
 IT Keratins

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
(17; mol. and biol. features of two new human squamous and
adenocarcinoma of lung cell lines)

IT Keratins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
(19; mol. and biol. features of two new human squamous and
adenocarcinoma of lung cell lines)

IT Antigens
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
(HPA (human pulmonary adenocarcinoma); mol. and biol. features of two
new human squamous and adenocarcinoma of lung cell lines)

IT Animal cell line
(RAL and CAEP; mol. and biol. features of two new human squamous and
adenocarcinoma of lung cell lines)

IT Gene, animal
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP
(Properties); BIOL (Biological study); OCCU (Occurrence)
(TP53, mutation; mol. and biol. features of two new human squamous and
adenocarcinoma of lung cell lines)

IT Lung, neoplasm
(adenocarcinoma, metastasis; mol. and biol. features of two new human
squamous and adenocarcinoma of lung cell lines)

IT Drug resistance
(antitumor; drug resistance of two new human squamous and
adenocarcinoma of lung cell lines)

IT Gene, animal
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP
(Properties); BIOL (Biological study); OCCU (Occurrence)
(c-Ki-ras, mutation; mol. and biol. features of two new human squamous
and adenocarcinoma of lung cell lines)

IT Cytoplasm
(cytosol, neuron-specific enolase in; mol. and biol. features of two
new human squamous and adenocarcinoma of lung cell lines)

IT Mutation
(deletion, del(1)(q32); mol. and biol. features of two new human
squamous and adenocarcinoma of lung cell lines)

IT Keratins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
(high-mol.-wt.; mol. and biol. features of two new human squamous and
adenocarcinoma of lung cell lines)

IT Chromosome
(human 1, deletion del(1)(q32); mol. and biol. features of two new
human squamous and adenocarcinoma of lung cell lines)

IT Chromosome
(human 2, pentasomy; mol. and biol. features of two new human squamous
and adenocarcinoma of lung cell lines)

IT Neoplasm
(metastasis, from lung; mol. and biol. features of two new human
squamous and adenocarcinoma of lung cell lines)

IT Cell morphology
Chromosome aberrations
Disease models
(mol. and biol. features of two new human squamous and adenocarcinoma
of lung cell lines).

IT Carcinoembryonic antigen
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
(mol. and biol. features of two new human squamous and adenocarcinoma
of lung cell lines)

IT p53 (protein)
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
 (mutation; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Ras proteins
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
 (p21c-Ki-ras, mutation; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Mutation
 (point; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Antitumor agents
 (resistance to; drug resistance of two new human squamous and adenocarcinoma of lung cell lines)

IT Lung, neoplasm
 (squamous cell carcinoma, metastasis; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT 50-07-7, Mitomycin-C 51-21-8 865-21-4, Vinblastine 3778-73-2, Ifosfamide 15663-27-1, Cisplatin 23214-92-8, Doxorubicin 33069-62-4, Taxol 33419-42-0, Etoposide 39800-16-3, 4-Hydroperoxycyclophosphamide 41575-94-4, Carboplatin 71486-22-1, Vinorelbine 95058-81-4, Gemcitabine 114977-28-5, Taxotere
 RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (drug resistance of two new human squamous and adenocarcinoma of lung cell lines)

IT 9014-08-8, Enolase
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (neuron-specific; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

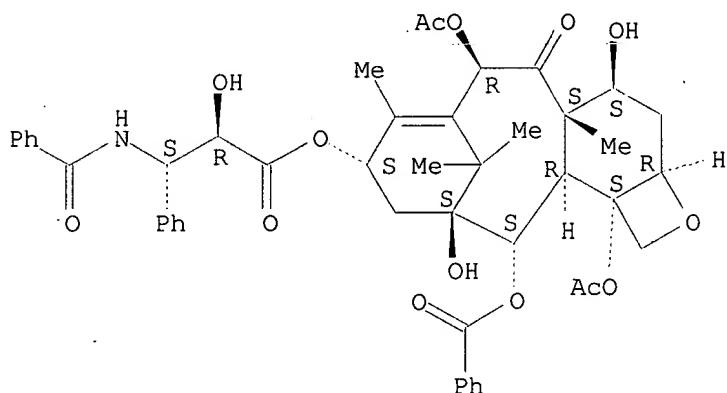
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ausubel, F; Current Protocols in Molecular Biology 1989, P2.2.1
- (2) Boring, C; Ca Cancer J Clin 1994, V44, P7 MEDLINE
- (3) Campling, B; Cancer 1992, V69, P2064 MEDLINE
- (4) Casey, G; Mol Cell Biol 1986, V6, P502 HCPLUS
- (5) Dalla, F; Science 1983, V219, P963
- (6) Devessa, S; Cancer Epidemiol Biomarkers Preven 1991, V1, P29
- (7) Dutrillaux, B; Adv Hum Genet 1975, V5, P119 MEDLINE
- (8) Gasperi-Campani, A; Eur J Cancer 1998, V36, P726
- (9) Gazadar, A; Anticancer Res 1994, V13, P261
- (10) Kashii, T; J Cancer Res Clin Oncol 1994, V120, P143 HCPLUS
- (11) King, C; Science 1985, V229, P974 HCPLUS
- (12) Makela, T; Eur J Cancer 1991, V27, P1323 HCPLUS
- (13) Mills, N; Cancer Res 1995, V55, P1444 HCPLUS
- (14) Nau, M; Nature 1985, V318, P69 HCPLUS
- (15) Negrini, M; Cancer Res 1992, V52, P1297 HCPLUS
- (16) Noguchi, M; Cancer 1995, V75, P2844 MEDLINE
- (17) Pulciani, S; J Cell Biochem 1982, V20, P51 HCPLUS
- (18) Rabbitts, P; Br Med Bull 1994, V50, P688 MEDLINE
- (19) Ranzani, G; Cancer Res 1990, V50, P7811 MEDLINE
- (20) Rodenhuis, S; Cancer Res 1992, V52, P2665s HCPLUS
- (21) Schwab, M; Nature 1983, V305, P245 HCPLUS
- (22) Seabright, M; Chromosoma 1972, V36, P204 MEDLINE
- (23) Southern, E; J Mol Biol 1975, V98, P503 HCPLUS
- (24) Spinazzi, A; Cancer Detect Prev 1994, V18, P209 MEDLINE
- (25) Taira, M; Proc Natl Acad Sci USA 1987, V84, P2980 HCPLUS
- (26) Tanigawa, N; Cancer Res 1982, V42, P2159 HCPLUS
- (27) Watson, R; Proc Natl Acad Sci USA 1982, V79, P4078 HCPLUS

- (28) World Health Organization; International Histological Classification of Tumors 2nd ed 1982
- (29) Zoli, W; J Cancer Res Clin Oncol 1996, V122, P237 HCPLUS
IT 33069-62-4, Taxol
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug resistance of two new human squamous and adenocarcinoma of lung cell lines)
- RN 33069-62-4 HCPLUS
CN Benzene propanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
(2aR, 4S, 4aS, 6R, 9S, 11S, 12aR, 12bS)-6, 12b-bis (acetoxy)-12-(benzoyloxy)-
2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-4, 11-dihydroxy-4a, 8, 13, 13-
tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-9-yl
ester, (.alpha.R, .beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



- L65 ANSWER 16 OF 18 HCPLUS COPYRIGHT 2002 ACS
AN 1998:562471 HCPLUS
DN 129:311598
TI Cytogenetic and molecular characterization of random chromosomal rearrangements activating the drug resistance gene, MDR1/P-glycoprotein, in drug-selected cell lines and patients with drug refractory ALL
AU Knutsen, Turid; Mickley, Lyn A.; Ried, Thomas; Green, Eric D.; Du Manoir, Stanislas; Schrock, Evelin; Macville, Marryn; Ning, Yi; Robey, Robert; Polymeropoulos, Michael; Torres, Rosarelis; Fojo, Tito
CS Medicine Branch, Division of Clinical Sciences, NCI, NIH, Bethesda, MD, USA
SO Genes, Chromosomes & Cancer (1998), 23(1), 44-54
CODEN: GCCAES; ISSN: 1045-2257
PB Wiley-Liss, Inc.
DT Journal
LA English
CC 3-4 (Biochemical Genetics)
Section cross-reference(s): 1, 14
AB Drug resistance, both primary and acquired, is a major obstacle to advances in cancer chemotherapy. In vitro, multidrug resistance can be mediated by P-glycoprotein (PGY1), a cell surface phosphoglycoprotein that acts to efflux natural products from cells. PGY1 is encoded by the MDR1 gene located at 7q21.1. Overexpression of MDR1 has been demonstrated in many cancers, both in patient tumors and in cell lines selected with a variety of chemotherapeutic agents. Recent studies in drug-selected cell lines and patients samples have identified hybrid mRNAs comprised of an active, but apparently random, gene fused 5' to MDR1 by constitutively expressed genes may be a mechanism for activation of this gene following

drug exposure. In this study, fluorescence in situ hybridization (FISH) using whole chromosome paints (WCP) and bacterial artificial chromosome (BAC)-derived probes showed structural rearrangements involving 7q in metaphase and interphase cells, and comparative genomic hybridization (CGH) revealed high levels of amplification at chromosomal breakpoints. In an adriamycin-selected resistant colon cancer line (S48-3s/Adr), WCP4/WCP7 revealed t(4;7)(q31;q21) and BAC-derived probes demonstrated that the breakpoint lay between MDR1 and sequences 500-1000 kb **telomeric** to it. Similarly, in a subline isolated following exposure to actinomycin D (S48-3s/ActD), a hybrid MDR1 gene composed of heme oxygenase-2 sequences (at 16p13) fused to MDR1 was identified and a rearrangement confirmed with WCP7 and a **subtelomeric** 16p probe. Likewise, in a **paclitaxel**-selected MCF-7 subline where CASP sequences (at 7q22) were shown to be fused to MDR1, WCP7 showed an elongated chromosome 7 with a homogeneously staining regions (hsr); BAC-derived probes demonstrated that the hsr was composed of highly amplified MDR1 and CASP sequences. In all three selected cell lines, CGH demonstrated amplification at breakpoints involving MDR1 (at 7q21) and genes fused to MDR1 at 4q31, 7q22, and 16p13.3. Finally, in samples obtained from two patients with drug refractory ALL, BAC-derived probes applied to archived marrow cells demonstrated that a breakpoint occurred between MDR1 and sequences 500-1000 kb **telomeric** to MDR1, consistent with a random chromosomal rearrangement.. These results support the proposal that random chromosomal rearrangement leading to capture and activation of MDR1 is a mechanism of acquired of drug resistance.

ST chromosome rearrangement drug resistance gene activation; gene MDR1 activation drug resistance leukemia; P glycoprotein gene drug resistance leukemia

IT Gene, animal

RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
 (CASP (CAAT displacement protein alternatively spliced product); chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Gene, animal

RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
 (HMOX2; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 and heme oxygenase 2 gene in drug resistance)

IT Gene, animal

Multidrug resistance proteins
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
 (MDR1; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Gene, animal

RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
 (NRFL; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Glycoproteins, specific or class

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
 (P170; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Leukemia

(acute lymphocytic; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Mutation

(chromosomal rearrangements activating P-glycoprotein multidrug

resistance gene MDR1 and heme oxygenase 2 gene in drug resistance)

IT Drug resistance
 (chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Intestine, neoplasm
 (colon, adenocarcinoma; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected colon adenocarcinoma cell line)

IT Chromosome
 (human 16; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Chromosome
 (human 1; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Chromosome
 (human 4; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Chromosome
 (human 7; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Nucleic acid hybridization
 (in situ, fluorescence; detection of chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Recombination, genetic
 (rearrangement; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT 9059-22-7, Heme oxygenase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (2; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 and heme oxygenase 2 gene in drug resistance)

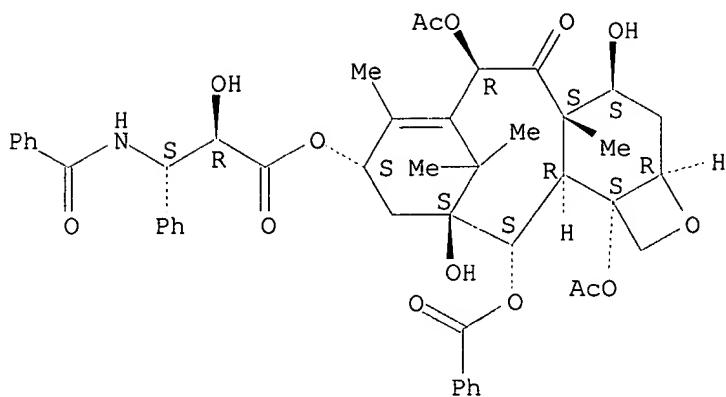
IT 50-76-0, Actinomycin D 25316-40-9, Adriamycin 33069-62-4,
Paclitaxel
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells)

IT 33069-62-4, **Paclitaxel**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells)

RN 33069-62-4 HCPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
 (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetoxy)-12-(benzoyloxy)-
 2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-
 tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl
 ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 17 OF 18 HCPLUS COPYRIGHT 2002 ACS
 AN 1998:200650 HCPLUS
 DN 128:265840
 TI **Paclitaxel** and water-soluble poly(L-glutamic acid)-
paclitaxel induce direct chromosomal abnormalities and cell death
 in a murine metastatic melanoma cell line
 AU Multani, Asha S.; Li, Chun; Ozen, Mustafa; Yadav, Maneesha; Yu, Dong-Fang;
 Wallace, Sidney; Pathak, Sen
 CS Department of Cell Biology, The University of Texas M. D. Anderson Cancer
 Center, Houston, TX, 77030, USA
 SO Anticancer Research (1997), 17(6D), 4269-4274 RC261.A1.A68
 CODEN: ANTRD4; ISSN: 0250-7005
 PB Anticancer Research
 DT Journal
 LA English
 CC 1-6 (Pharmacology)
 AB The effects of **paclitaxel** and water-sol. poly(L-glutamic acid)-
paclitaxel (PG-TXL) on chromosome morphol., **telomeric**
 assocns., and induction of cell death were studied in a murine melanoma
 cell line (K-1735 clone X-21). Cells were treated with various concns.
 (0.1-8.0 .mu.g/mL) of **paclitaxel** alone, PG alone, or PG-TXL for
 2 h and 4 h and harvested immediately without recovery. The frequency of
 metaphases with **telomeric** assocns. increased, metaphases had
 clumped and distorted chromosome morphol., cells accumulated in metaphase
 (mitotic arrest), and cell death had been induced. Cells treated with
 PG-TXL showed more such abnormalities than did cells treated with either
paclitaxel or PG alone. PG-TXL may be superior to
paclitaxel alone in inducing cytotoxic effects, and these effects
 could be mediated by various chromosomal abnormalities in cancer cells.
 ST **paclitaxel** polyglutamate conjugate melanoma chromosome mitosis;
 antitumor **paclitaxel** polyglutamate conjugate
 IT Antitumor agents
 (melanoma; chromosomal abnormalities and cell death induction by
 paclitaxel and **paclitaxel**-poly(L-glutamate) conjugate
 as)
 IT Antitumor agents
 (metastasis; chromosomal abnormalities and cell death induction by
 paclitaxel and **paclitaxel**-poly(L-glutamate) conjugate
 as)
 IT Chromosome
 (**paclitaxel** and **paclitaxel**-poly(L-glutamate)
 conjugate induction of chromosomal abnormalities in metastatic melanoma
 cells)
 IT Mitosis
 (**paclitaxel** and **paclitaxel**-poly(L-glutamate))

conjugate induction of mitotic abnormalities in metastatic melanoma cells)

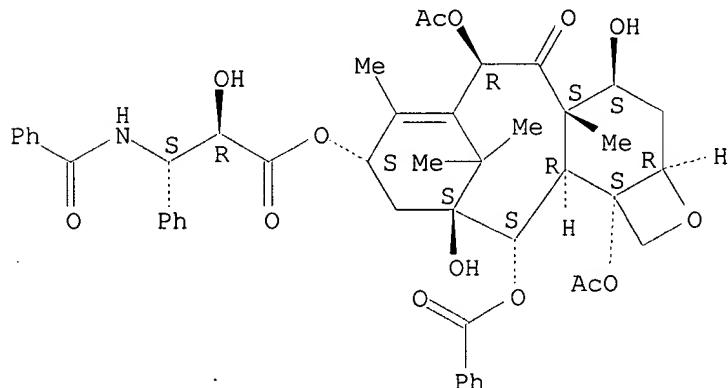
IT 25513-46-6D, Poly(L-glutamic acid), conjugate with **paclitaxel**
33069-62-4, Paclitaxel 33069-62-4D,
Paclitaxel, conjugate with poly(L-glutamic acid)
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (chromosomal abnormalities and cell death in metastatic melanoma cells induction by)

IT **33069-62-4, Paclitaxel 33069-62-4D,**
Paclitaxel, conjugate with poly(L-glutamic acid)
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (chromosomal abnormalities and cell death in metastatic melanoma cells induction by)

RN 33069-62-4 HCPLUS

CN Benzene propanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
 (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-
 2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-
 tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl
 ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

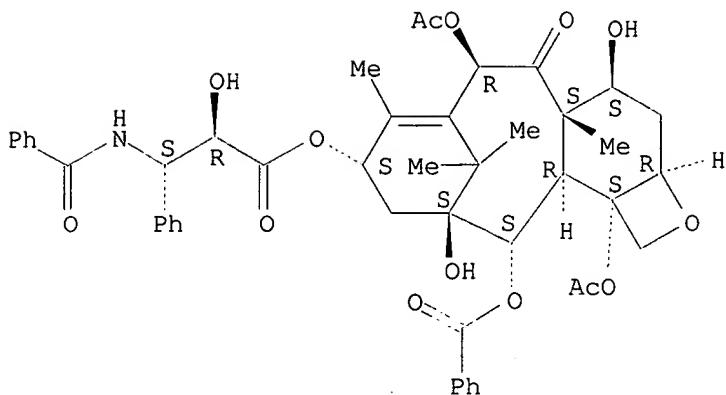
Absolute stereochemistry. Rotation (-).



RN 33069-62-4 HCPLUS

CN Benzene propanoic acid, .beta.- (benzoylamino)-.alpha.-hydroxy-,
 (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-
 2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-
 tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl
 ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:29884 HCAPLUS

DN 128:178752

TI Inhibition of **telomerase** activity by PKC inhibitors in human nasopharyngeal cancer cells in culture

AU Ku, Wei-Chi; Cheng, Ann-Joy; Wang, Tzu-Chien V.

CS Department of Molecular and Cellular Biology, College of Medicine, Chang Gung University, Kwei-San, Taiwan

SO Biochemical and Biophysical Research Communications (1997), 241(3), 730-736

CODEN: BBRCA9; ISSN: 0006-291X

PB Academic Press

DT Journal

LA English

CC 14-1 (Mammalian Pathological Biochemistry)

Section cross-reference(s): 1, 7, 13

AB **Telomerase** is a specialized ribonucleoprotein polymerase that adds hexanucleotides (TTAGGG) onto human chromosomal ends. The expression of **telomerase** activity has been assocd. with cell immortalization and the malignant phenotype in most cancers. How the **telomerase** activity is regulated in cancer cells is presently not known. In this work, the effects of cell cycle blockers, DNA damaging agents, TopII inhibitors and proteins kinase inhibitors on the **telomerase** activity were examd. in cultured nasopharyngeal carcinoma cells NPC-076. Agents which interfere with tubulin assembly (Taxol and vinblastine) and agents which arrest cells at S phase (methotrexate and 5-fluorouracil) did not inhibit **telomerase** activity of treated cells. Agents which damage DNA (cisplatin, Me methanesulfonate, and UV radiation) and TopII inhibitors (etoposide and daunorubicin) also did not inhibit **telomerase** activity of treated cells. Among the protein kinase inhibitors examd., no significant inhibition of **telomerase** activity was obsd. with cells treated with quercetin, H-89, or herbimycin A. On the other hand, two protein kinase C (PKC) inhibitors (bisindolylmaleimide I and H-7) were found to produce a big inhibition of **telomerase** activity in treated cells. Staurosporine produced a moderate inhibition, and sphingosine had a small inhibitory effect. The inhibition of **telomerase** activity by PKC inhibitors appears to be specific since the treated cells were mostly viable (i.e., greater than 75%) and still retained significant levels of protein synthesis capability. These results implicate that protein kinase C is involved in the regulation of **telomerase** activity in vivo.

ST **telomerase** regulation protein kinase C cancer; antitumor PKC inhibitor **telomerase**

IT Antitumor agents

Neoplasm
 (inhibition of telomerase activity by PKC inhibitors in human nasopharyngeal cancer cells)

IT 62996-74-1, Staurosporine 84477-87-2, H-7 169939-94-0
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (inhibition of telomerase activity by PKC inhibitors in human nasopharyngeal cancer cells)

IT 120178-12-3, Telomerase 141436-78-4, Protein kinase C
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (inhibition of telomerase activity by PKC inhibitors in human nasopharyngeal cancer cells)

IT 120178-12-3, Telomerase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (inhibition of telomerase activity by PKC inhibitors in human nasopharyngeal cancer cells)

RN 120178-12-3 HCAPLUS

CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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L103 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 AN 2002:386690 BIOSIS
 DN PREV200200386690
 TI Simultaneous targeting of telomeres and telomerase as a cancer therapeutic approach.
 AU Mo, Yiqun (1); Gan, Yuebo (1); Johnston, Jeffrey S. (1); Song, Saehum (1);
 Xiao, Xiaodong (1); Wientjes, M. Guillaume (1); Au, Jessie L.-S. (1)
 CS (1) Ohio State University, Columbus, OH USA
 SO Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2002) Vol. 43, pp. 251. print.
 Meeting Info.: 93rd Annual Meeting of the American Association for Cancer Research San Francisco, California, USA April 06-10, 2002
 ISSN: 0197-016X.
 DT Conference
 LA English
 CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
 Cytology and Cytochemistry - Human *02508
 Biochemical Studies - General *10060
 Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
 Enzymes - General and Comparative Studies; Coenzymes *10802
 Pathology, General and Miscellaneous - Therapy *12512
 Pharmacology - General *22002

Pharmacology - Clinical Pharmacology *22005
 Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects *24004
 Neoplasms and Neoplastic Agents - Therapeutic Agents; Therapy *24008
 BC Hominidae 86215
 IT Major Concepts
 Pharmacology; Tumor Biology
 IT Parts, Structures, & Systems of Organisms
 telomere
 IT Chemicals & Biochemicals
 3'-azido-3'-deoxythymidine [AZT]: antineoplastic - drug,
 enzyme inhibitor - drug; RNA; paclitaxel: antineoplastic - drug; telomerase: regulation
 IT Miscellaneous Descriptors
 cell growth rate; Meeting Abstract
 ORGN Super Taxa
 Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
 ORGN Organism Name
 FaDu cell line (Hominidae): apoptosis, human pharynx tumor cells
 ORGN Organism Superterms
 Animals; Chordates; Humans; Mammals; Primates; Vertebrates
 RN 30516-87-1 (3'-AZIDO-3'-DEOXYTHYMIDINE)
 33069-62-4 (PACLITAXEL)
 120178-12-3 (TELOMERASE)

L103 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 2001:468784 BIOSIS
 DN PREV200100468784
 TI 3'-azido3'-deoxythymidine enhances paclitaxel activity in human FaDu cells.
 AU Johnston, Jeffrey S. (1); Wientjes, M. Guillaume (1); Au, Jessie L.-S. (1)
 CS (1) The Ohio State University, Columbus, OH USA
 SO Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2001) Vol. 42, pp. 507. print.
 Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research New Orleans, LA, USA March 24-28, 2001
 ISSN: 0197-016X.
 DT Conference
 LA English
 SL English
 CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
 Cytology and Cytochemistry - Human *02508
 Biochemical Studies - General *10060
 Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
 Pathology, General and Miscellaneous - Therapy *12512
 Pharmacology - General *22002
 Pharmacology - Clinical Pharmacology *22005
 Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects *24004
 BC Hominidae 86215
 IT Major Concepts
 Pharmacology; Tumor Biology
 IT Chemicals & Biochemicals
 3'-azido-3'-deoxythymidine [AZT]: antineoplastic - drug,
 pharmaceutical adjunct - drug; paclitaxel: AZT
 -induced antitumor activity enhancement, antineoplastic - drug
 IT Miscellaneous Descriptors
 drug regimen; Meeting Abstract
 ORGN Super Taxa
 Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
 ORGN Organism Name

FaDu cell line (Hominidae): combination drug treatment, human epidermoid carcinoma cell line, in-vitro model system

ORGN Organism Superterms
 Animals; Chordates; Humans; Mammals; Primates; Vertebrates

RN 30516-87-1 (3'-AZIDO-3'-DEOXYTHYMIDINE)
 33069-62-4 (PACLITAXEL)

L103 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 2001:369554 BIOSIS

DN PREV200100369554

TI AZT enhances antitumor activity of paclitaxel in human FaDu xenografts in mice.

AU Song, SaeHeum (1); Wientjes, M. Guill (1); Au, Jessie L.-S. (1)

CS (1) Ohio State University, Columbus, OH USA

SO Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2001) Vol. 42, pp. 81. print.
 Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research New Orleans, LA, USA March 24-28, 2001
 ISSN: 0197-016X.

DT Conference

LA English

SL English

CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
 Cytology and Cytochemistry - Animal *02506
 Cytology and Cytochemistry - Human *02508
 Biochemical Studies - General *10060
 Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
 Pathology, General and Miscellaneous - Therapy *12512
 Pharmacology - General *22002
 Pharmacology - Clinical Pharmacology *22005
 Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects *24004
 Neoplasms and Neoplastic Agents - Therapeutic Agents; Therapy *24008
 Chemotherapy - Antiviral Agents *38506

BC Hominidae 86215
 Muridae 86375

IT Major Concepts
 Infection; Pharmacology; Tumor Biology

IT Chemicals & Biochemicals
 3-'azidothymidine [AZT]: antiviral - drug,
 paclitaxel activity enhancer; paclitaxel:
 antineoplastic - drug

IT Miscellaneous Descriptors
 apoptosis; body weight loss; drug interactions; Meeting Abstract

ORGN Super Taxa
 Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia; Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name
 FaDu cell line (Hominidae): human pharynx tumor cells; mouse (Muridae): animal model

ORGN Organism Superterms
 Animals; Chordates; Humans; Mammals; Nonhuman Mammals; Nonhuman Vertebrates; Primates; Rodents; Vertebrates

RN 30516-87-1 (3-'AZIDOTHYMIDINE)
 33069-62-4 (PACLITAXEL)

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L124 ANSWER 1 OF 3 WPIX (C) 2002 THOMSON DERWENT
AN 2001-071022 [08] WPIX
DNC C2001-019846
TI Inhibiting or reducing growth of cell for treating cancer, comprising administering telomere damage-inducing agent and telomerase inhibitory agent to the cell.
DC B04 B05 D16
IN AU, J L; WIENTJES, G
PA (AUJL-I) AU J L; (WIEN-I) WIENTJES G
CYC 92
PI WO 2000074667 A2 20001214 (200108)* EN 97p A61K031-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TT TZ UA UG UZ VN YU ZA ZW
AU 2000054665 A 20001228 (200119) A61K031-00
ADT WO 2000074667 A2 WO 2000-US15544 20000605; AU 2000054665 A AU 2000-54665
20000605
FDT AU 2000054665 A Based on WO 200074667
PRAI US 1999-137549P 19990604
IC ICM A61K031-00
AB WO 200074667 A UPAB: 20010207
NOVELTY - Inhibiting or reducing the growth of a cell (M1), comprising administering a telomere damage-inducing agent (I) and a telomerase inhibitory agent (II) to the cell, so that an inhibition or reduction in the growth of the cell is achieved, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) identifying (M2) an agent or agents that inhibits or reduces the growth of a cell, comprising:
(a) contacting a cell with at least one agent;
(b) determining if telomere damage has occurred;
(c) contacting a cell with the same or another agent; and
(d) determining if a reduction in telomerase activity has occurred, where an agent or agents, alone or in combination, that are determined to induce telomere damage and inhibit telomerase activity, are inhibits of cell growth;
(2) an agent or agents identified by (M2);

(3) a pharmaceutical composition (III) comprising the agent or agents identified by (M2);
(4) a composition (IV) suitable for inhibiting or reducing the growth of a cell comprising (I) and (II);
(5) an article (V) of manufacture comprising a vial containing (I) and (II) which are purified;
(6) enhancing (M3) the efficacy of a chemotherapeutic agent, comprising administering a chemotherapeutic agent to a cell in the presence of (II);
(7) detecting (M4) telomerase activity in cell extract, comprising:
(a) incubating a reaction mixture comprising a cell extract, a nucleic acid substrate for a telomerase, and nucleotide triphosphates, for the nucleic acid substrate to be polymerized,
(b) contacting the substrate with at least one nucleic acid primer and subjecting the substrate to a polymerase chain reaction; and
(c) detecting the presence of polymerase chain reaction products to detect telomerase activity in the cell extract;
(8) determining (M5) telomere length, comprising:
(a) hybridizing telomeric DNA fragments with a telomere probe; and
(b) determining the amount of hybridized telomere probe present, where the amount of hybridized telomere probe present is an indication of telomere length; and
(9) identifying (II), comprising:
(a) contacting a cell with an agent;
(b) incubating a reaction mixture comprising an extract of the cell, a nucleic acid substrate for a telomerase, and nucleotide triphosphates for the nucleic acid substrate to be polymerized,
(c) contacting the substrate with at least one nucleic acid primer;
(d) subjecting the substrate to a polymerase chain reaction; and
(e) detecting a decrease in the presence of polymerase chain reaction products to identify (II).

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Inhibitor of cell growth; inducer of telomere damage.

Antitumor effect of an agent that damages telomeres (i.e. paclitaxel) by the telomerase inhibitor AZT, in immunodeficient mice bearing human head and neck cancer FaDu xenografts, was tested. The activity of paclitaxel, with or without AZT, was evaluated in immunodeficient mice (male Balb/c nu/nu mice) bearing the human pharynx FaDu xenografts. The mice were divided into four treatment groups: saline control, AZT, paclitaxel, paclitaxel+AZT. The antitumor effect of the drug treatments was measured. The results showed that AZT enhanced the in vivo antitumor effect of paclitaxel, treatment with the combination of paclitaxel and AZT resulted in a decrease in tumor size, and animals in the control group, paclitaxel group, and AZT group showed an up to 4-fold increase in tumor size. The tumor size of the animals which received the combination of paclitaxel and AZT was significantly smaller than all other dose groups. Treatment with single agents (either paclitaxel or AZT) produced minimal toxicity with no toxicity-related death and minimal body weight loss compared to the pretreatment weight and the addition of AZT to paclitaxel did not enhance the body weight loss, indicating that AZT did not enhance the host toxicity of paclitaxel.

USE - The agent or agents identified by (M2) are useful for inhibiting or reducing the growth of a cell and for treating aberrant cell growth in a mammal, especially a human. (I) and (II) are useful for treating cancer, and identifying a patient having a cancer. (II) is useful for inhibiting or reducing resistance of a cell to (I). (All claimed). (I) and (II) are useful in screening assays for diagnosis, prognosis and treatment of cancer and in the design, formulation, synthesis, manufacture, and/or production of a drug or pharmaceutical composition for

use in the diagnosis, prognosis and treatment of cancer.

ADVANTAGE - The methods of measuring telomerase activity have increased sensitivity compared to prior art methods.

Dwg.0/10

FS CPI

FA AB; DCN

MC CPI: B04-B03B; B04-E01; B04-E05; B04-E06; B04-N04; B11-C08E1; B11-C08E3; B11-C08E5; B12-K04A1; B12-K04E; B12-K04F; B14-H01; B14-H01B; D05-H09; D05-H18B

TECH UPTX: 20010207

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: In (M1) the growth is aberrant and the cell is a tumor cell of brain, breast, ovary, testes, bladder, prostate, colon, lung, liver, pancreas or uterus or the cell is a leukemic cell. The tumor is benign or malignant and the growth is hyperplastic or hypertrophic. The inhibition or reduction in the growth of the cell, preferably a human cell, comprises apoptosis. (I) is paclitaxel or its derivative and (II) is a nucleotide analog, such as AZT or d4T or its derivative or an antisense nucleic acid corresponding to a telomerase. In (M4), the cell extract is derived from a human cell that has been contacted with (II).. (M4) further comprises contacting the cell extract with (II). The nucleic acid substrate comprises a sequence TTAGGG and the nucleic acid primer is labeled with a radioisotope or a fluorescent label and comprises sequences AATCCGTCGAGCAGAGTT and CCCTTACCCCTTACCCCTTACCCCTTA. In (M5), the telomeric DNA fragments are produced using a restriction enzyme such as HinfI, HaeIII or HhaI and the telomeric DNA is derived from a cell that has been contacted with (II). The telomere probe comprises a sequence TTAGG and TTAGGGTTAGGGTTAGGGTTAGGG and is labeled with a radioisotope or a fluorescent label.

Preferred Formulation: (I) or (II) is formulated as a nanoparticle 500 nm-1 micro-m in diameter and comprises a cross linked gelatin or is formulated as a microparticle of about 1-10 micro-m diameter.

Preferred Agent: In (V), (I) and (II) are packaged in separate vials and are formulated in a carrier.

ABEX

ADMINISTRATION - (I) and (II) are administered locally, systemically, or regionally as a timed-release formulation and as a sub-therapeutic dose (claimed) at a dose of 0.0001-100, preferably 0.10-4 mg/kg. (IV) is administered by oral, nasal, parenteral, topical, rectal, vaginal, intralesional, intraorbital, intracapsular, intracisternal or ophthalmic route or by inhalation.

L124 ANSWER 2 OF 3 WPIX (C) 2002 THOMSON DERWENT

AN 2000-116702 [10] WPIX

DNC C2000-035674

TI Treatment of AIDS-associated Kaposi's sarcoma.

DC B02

IN DUCHIN, K; GRIFFING, S; HARRIMAN, G R; METTINGER, K L; DUCHIN, K L

PA (BAKE-N) BAKER NORTON PHARM INC

CYC 81

PI WO 9965307 A1 19991223 (200010)* EN 41p A01N043-20

RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

AU 9867873 A 20000105 (200024) A01N043-20

NO 9904712 A 19991126 (200026) A61K031-33

CN 1255041 A 20000531 (200045) A01N043-20

EP 1071329 A1 20010131 (200108) EN A01N043-20

R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

JP 2001114685 A 20010424 (200140) # 62p A61K031-337

KR 2001005949 A 20010115 (200151)# A61K031-36
 JP 2002518297 W 20020625 (200243) 41p A61K031-337
 ADT WO 9965307 A1 WO 1998-US6221 19980330; AU 9867873 A AU 1998-67873
 19980330, WO 1998-US6221 19980330; NO 9904712 A WO 1998-US6221 19980327,
 NO 1999-4712 19990927; CN 1255041 A CN 1998-805000 19980330, WO
 1998-US6221 19980330; EP 1071329 A1 EP 1998-913281 19980330, WO
 1998-US6221 19980330; JP 2001114685 A JP 1999-324494 19991008; KR
 2001005949 A KR 1999-709026 19990927; JP 2002518297 W WO 1998-US6221
 19980330, JP 2000-554198 19980330
 FDT AU 9867873 A Based on WO 9965307; EP 1071329 A1 Based on WO 9965307; JP
 2002518297 W Based on WO 9965307
 PRAI WO 1998-US6221 19980330; US 1997-41651P 19970327; JP 1999-324494
 19991008; KR 1999-709026 19990927
 IC ICM A01N043-20; A61K031-33; A61K031-337; A61K031-36
 ICS A61K045-00; A61P035-00; A61P037-04; A61P043-00
 AB WO 9965307 A UPAB: 20010809
 NOVELTY - Treatment of AIDS associated Kaposi's sarcoma comprises
 concomitantly administering a taxane with one or more protease inhibitors.
 ACTIVITY - Cytostatic; Anti-HIV. Initial treatment of AIDS-associated
 Kaposi's sarcoma consisted of a 3 hour infusion of paclitaxel at
 100 mg/m² administered every 14 days, followed by treatment at 75 mg/m².
 The patient was a 33 year old black male diagnosed as HIV-positive in 1994
 and suffering from Kaposi's sarcoma since February 1995. Previous
 chemotherapy included DaunoXome (RTM) to which he showed stable disease
 but had toxicity, and Adriamycin (RTM), bleomycin and vincristine, to
 which he responded partially, but subsequently failed. The patient was on
 antiretroviral therapy at the time he entered the protocol which consisted
 of the protease inhibitor indinavir and two reverse transcriptase
 inhibitors, stavudine and lamivudine. He continued on these
 medications. During the treatment with the reduced dose of
 paclitaxel, after the first cycle, the patient showed a partial
 response to paclitaxel. The Karnofsky performance score improved
 from 60 at baseline to 90 at cycle 10 and the Symptom Distress Scale score
 improved from 35 at baseline to 18 at cycle 10. A marked decrease in edema
 and the prominence of facial lesions was seen by cycle 7.
 MECHANISM OF ACTION - Protease-Inhibitor; Reverse-Transcriptase-
 Inhibitor.
 USE - The method can be used when treatment with liposomal
 anthracyclines, liposomal doxorubicin, combinations of adriamycin,
 bleomycin or vincristine, liposomal anthracyclines and combinations of
 adriamycin, bleomycin or vincristine or two or more cytotoxic
 chemotherapies have failed.
 ADVANTAGE - The compositions are easily administered and can be given
 at dosages that are safe and provide for manageable side effects.
 Dwg.0/0
 FS CPI
 FA AB; DCN
 MC CPI: B06-A03; B14-A02; B14-D06; B14-D07C; B14-G01B; B14-H01
 TECH UPTX: 20000228
 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method - The method further
 comprises concomitantly administering one or more reverse transcriptase
 inhibitor.
 ABEX ADMINISTRATION - The dose of taxane is 30-200 (preferably 50-155,
 especially 100) mg/m² every two weeks. Preferably an induction therapy of
 10 weeks is carried out.

L124 ANSWER 3 OF 3 WPIX (C) 2002 THOMSON DERWENT
 AN 2000-022942 [02] WPIX
 DNC C2000-005511
 TI Composition for the treatment of cancer or infectious disease.
 DC B04 B05 D16
 IN BARTHOLEYNS, J; FOURON, Y; ROMET-LEMONNE, J

PA (IDMI-N) IDM IMMUNO-DESIGNED MOLECULES
 CYC 87
 PI WO 9951248 A1 19991014 (200002)* EN 26p A61K035-14
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
 OA PT SD SE SL SZ UG ZW
 W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB
 GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
 LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
 TT UA UG US UZ VN YU ZA ZW
 AU 9931479 A 19991025 (200011) A61K035-14
 EP 1067944 A1 20010117 (200105) EN A61K035-14
 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
 JP 2002510639 W 20020409 (200227) 27p A61K035-14
 ADT WO 9951248 A1 WO 1999-EP2105 19990329; AU 9931479 A AU 1999-31479
 19990329; EP 1067944 A1 EP 1999-913310 19990329, WO 1999-EP2105 19990329;
 JP 2002510639 W WO 1999-EP2105 19990329, JP 2000-542019 19990329
 FDT AU 9931479 A Based on WO 9951248; EP 1067944 A1 Based on WO 9951248; JP
 2002510639 W Based on WO 9951248
 PRAI EP 1998-400783 19980402
 IC ICM A61K035-14
 ICS A61K045-00; A61P031-00; A61P035-00; C12N005-00; C12N005-08
 ICI A61K031:00, A61K035:14, A61K038:19, A61K039:00; A61K031:00, A61K035-14;
 A61K035-14, A61K038:19; A61K035-14, A61K039:00
 AB WO 9951248 A UPAB: 20000112
 NOVELTY - Combined composition contains the following individual
 components, in the form of a kit-of-parts:
 (a) monocyte derived cells, particularly cytotoxic macrophages; and
 (b) chemotherapy or immunotherapy drugs, for the simultaneous,
 separate or sequential use, for the treatment of cancer or infectious
 diseases.
 USE - The composition is useful for the treatment of cancer or
 infectious diseases.
 Dwg.0/2
 FS CPI
 FA AB; DCN
 MC CPI: B02-A; B02-C; B02-P; B04-A07A; B04-F04; B04-H02B; B04-H02N; B04-H04;
 B04-H05C; B04-M01; B05-A03B; B10-A07; B10-A13D; B14-H01;
 D05-H07; D05-H08
 TECH UPTX: 20000112
 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred materials: The monocyte
 derived cells contain chemotherapy or immunotherapy drugs. The
 chemotherapy drug is selected among cytotoxic compounds such as
 anthracyclins, daunorubicin, adriamycin, taxoter derivatives, vinca
 alkaloids, vincristine, taxol, carmustine, cisplatin,
 fluorouracils, cytostatic compounds such as polyamine inhibitors,
 topoisomerase inhibitors, tamoxifen, prodsone, or sandostatin, or
 compounds inducing apoptosis such as sodium butyrate or mitomycin C,
 antibiotics such as penicillins, P-lactamines, cephalosporins, cyclins,
 aminoglycosides, macrolides or sulfamides, or antiviral drugs such as
 AZT, protease inhibitors or acyclovir, retrovir or
 foscarnet. The immunotherapy drug is selected from cytokines such as
 cyclosporin, azathioprine, cyclophosphamide, IFN-gamma, IL-12, IL-2,
 GM-CSF, G-CSF, immuno-adjuvants such as murapeptides or BCG, and vaccines
 directed against tumor or infectious antigens, in the presence or not of
 adjuvants.
 Preparation: The monocyte derived cells are such as prepared by:
 (i) recovery of blood derived mononuclear cells directly from blood
 apheresis or from blood bag collection, followed if necessary by
 centrifugation, to eliminate a substantial part of red blood cells
 granulocytes and platelets, and collection of peripheral blood leukocytes;
 (ii) washing peripheral blood leukocytes by centrifugation (to remove 90%
 of platelets, red blood cells and debris) to obtain mononuclear cells;
 (iii) resuspension of the total mononuclear cells (monocytes +

lymphocytes) obtained at the preceding step in culture medium (RPMI or IMDM type) at 10⁶ to 2.10⁷ cells/ml, possibly completed by cytokines and/or autologous serum, and culture for 5-10 days at 37 degreesC under O₂/CO₂ atmosphere in hydrophobic gas permeable bags, to obtain monocyte derived cells and contaminating lymphocytes.

The process comprises the additional step of freezing at temperature below or equal to -80 degreesC aliquots of the above said suspension, with the addition of a cryo-preserved. The process comprises the additional step of melting said above frozen aliquots at a temperature enabling to obtain a suspension of monocyte derived cells, for instance at 4 degreesC, washing said suspension and resuspending it, for instance in an isotonic medium, to obtain a suspension of monocyte derived cells.

ABEX

ADMINISTRATION - The monocyte-derived cells and the chemotherapy or immunotherapy drugs are in the form of injectable solutions. The injectable solutions are in the form of locally injectable solutions. The injectable solutions are in the form of systemically injectable solutions. The monocyte derived cells are administered at a dose of 10⁷-10¹⁰ (especially 10⁸-10⁹) monocyte derived cells per injection. The monocyte derived cells are administered in a repeated way up to ten times, the interval between each administration being between three days to two months. The immunotherapy or chemotherapy drug is administered at a dose of 0.1-1000 mg/day. In the case of administration of a drug chosen among immunotherapy drug, antiviral drug, cytotoxic drugs, or antibiotics, the drug being administered at a dose of 10-1000 mg/day. In the case of administration of a drug chosen among cytotoxic compounds, cytostatic compounds, compounds inducing apoptosis or cytokines, the drug is administered at a dose of 0.1-100 mg/day. The immunotherapy or chemotherapy drug is administered in a repeated way up to 10 times, the interval between each administration being between one day to two months. The chemotherapy or immunotherapy drug and the monocyte derived cells are injected simultaneously. The chemotherapy or immunotherapy drug and the monocyte-derived cells are administered in sequential way, the immunotherapy or chemotherapy drug being administered before the monocyte derived cells. The interval of time between the administration of the monocyte-derived cells and the administration of the immunotherapy or chemotherapy drugs is of one day to two months. The monocyte-derived cells and the chemotherapy or immunotherapy drug are administered sequentially, the monocytes derived cells being administered before the immunotherapy or chemotherapy drug. The monocyte-derived cells are administered before the administration of a vaccine directed to tumor or infectious antigens, the monocyte derived cells administration being possibly preceded by a chemotherapy treatment.

EXAMPLE - Patients, whose primary melanoma tumor was removed by surgery, are treated with chemotherapy agent (DTIC) (dacarbazine) after relapse. When their blood count is back to normal, blood is drawn up through apheresis in order to prepare large amounts of MD-APCS. These cells are then incubated for 4 hours with allogeneic tumor extract. 3 weekly subcutaneous injections (at 4 different sites) of 10⁶ cells are made. Two months later, a cocktail of three antigens (MAGE-3, MELAN A and gp-100) plus adjuvant is injected to the patients in order to boost the immune system. The increased immune response is monitored by measuring the number of antigen specific CD8 T lymphocytes by ELISPOT technique. It is also assessed that the relapse-free time is significantly increased.

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(FILE 'REGISTRY' ENTERED AT 12:07:57 ON 15 DEC 2002)

FILE 'HCAPLUS' ENTERED AT 12:09:09 ON 15 DEC 2002

FILE 'MEDLINE' ENTERED AT 12:09:25 ON 15 DEC 2002

L66 7297 S L18
 L67 9591 S L19 OR L20
 L68 9591 S L66,L67
 L69 6581 S L16
 L70 8397 S L23
 L71 8397 S L69,L70
 L72 5 S L68 AND L71
 E ANTISENSE/CT
 E E6+ALL
 L73 11150 S E17+NT
 E NUCLEOTIDE/CT
 E E48+ALL
 L74 320607 S E7+NT
 L75 965380 S D13./CT
 L76 1168 S L71 AND L73-L75
 L77 542 S (L73 OR L74 OR L75) (L) (TU OR AD OR PD)/CT AND L76
 L78 436 S L77 AND C4./CT
 L79 153 S L78 AND PY<=1999
 E ANTOINEOPLASTIC COMBINED CHEMOTHERAPY/CT
 E E4+ALL
 L80 47689 S E38+NT
 E DRUG COMBINATION/CT
 E E6+ALL
 L81 34504 S E4
 E DRUG THERAPY, COMBINATION/CT
 E E3+ALL
 L82 70827 S E4+NT
 L83 319 S L77 AND L80-L82
 L84 97 S L83 AND PY<=1999
 L85 93 S L84 AND C4./CT
 L86 83 S L85/ENG
 L87 0 S L84 AND ?TELOMER?
 L88 76 S L86 AND (PACLITAXEL OR TAXOL)/TI,CN,CT
 L89 15 S L88 NOT DEOXYCYTIDINE

FILE 'CANCERLIT' ENTERED AT 12:21:06 ON 15 DEC 2002
 L90 1610 S L68
 L91 8604 S L71
 L92 3 S L90 AND L91

FILE 'EMBASE' ENTERED AT 12:21:40 ON 15 DEC 2002
 L93 17936 S L68
 L94 12253 S L71
 L95 78 S L93 AND L94
 L96 50 S L95 AND PY<=1999
 L97 43 S L96/ENG
 L98 18 S L97 NOT AB/FA
 L99 25 S L97 NOT L98

FILE 'BIOSIS' ENTERED AT 12:24:22 ON 15 DEC 2002
 L100 8 S L95
 SEL DN AN 3
 L101 1 S L100 AND E1-E2
 L102 3 S L100 AND (AU ? OR WIENTJES ?)/AU
 L103 3 S L101,L102

FILE 'BIOSIS' ENTERED AT 12:25:55 ON 15 DEC 2002

FILE 'WPIX' ENTERED AT 12:26:13 ON 15 DEC 2002
 L104 807 S L19 OR L20
 E STAUVIDINE/DCN
 E SANILVUDINE/DCN
 E D4T/DCN

E D-4T/DCN
E D 4T/DCN
E AZT/DCN
E E3+ALL
L105 389 S E2
L106 7 S DIDEOXY (L) DIDEHYDROTHYMIDINE
L107 937 S L104-L106
L108 59 S STAVUDIN?
E STAVUDIN/DCN
L109 937 S L107,L108
L110 1353 S L23
E TAXOL/DCN
E E3+ALL
L111 763 S E2
L112 1468 S L110,L111
L113 23 S L109 AND L112
L114 1 S L113 AND (AU ? OR WIENTJES ?)/AU
E R11606+ALL/DCN
L115 90 S E1
L116 23 S L115,L109 AND L112
L117 1 S L114 AND L116
L118 22 S L113,L116 NOT L117
L119 12 S (P631 OR P632 OR P633 OR P630)/M0,M1,M2,M3,M4,M5,M6 AND L118
L120 8 S (B14-H01 OR C14-H01 OR B14-H01A OR C14-H01A OR B14-H01B OR C1
L121 0 S (B14-S09 OR C14-S09 OR B12-C09 OR C12-C09)/MC AND L118
L122 12 S L119,L120
SEL DN AN 7 9 L122
L123 2 S E1-E4
L124 3 S L117,L123 AND L104-L123
L125 10 S L118 NOT L122

FILE 'WPIX' ENTERED AT 12:38:04 ON 15 DEC 2002